

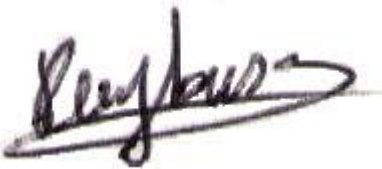





TOTAL IRRADIATION DOSE TEST REPORT

RHRLVDS32 (DC0804A) High speed differential line receivers *From* ST Microelectronics

Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804		Labège, May 22 nd , 2008	
 		TRAD, Bat. Gallium 17, Voie l'Occitane . BP 47471 31674 LABEGE Cedex ☎ : (33)5 61 00 95 60 Fax: (33)5 61 00 95 61 E-mail: trad@trad.fr http://www.trad.fr	
VISAS			
Written by Name: L.PUYBNUSQUE Date: 30/05/2008 	Verified by / Quality control Name: A. ROUSSET Date: 02/06/2008 	Approved by Name: W. FALO Date: 04/06/2008 	
Rev. : 0. Creation of the document			
TO: ST Microelectronics Mr. Patrick BRIAND		Ref: Project/program:	

CONTENTS

1. INTRODUCTION.....	4
2. DOCUMENTS.....	4
2.1. Applicable documents	4
2.2. Reference documents	4
3. PART INFORMATIONS	4
4. DOSIMETRY AND IRRADIATION FACILITY	5
5. TEST EQUIPMENT IDENTIFICATION	5
6. TEST PARAMETERS.....	6
7. BIAS CONDITIONS.....	8
8. DELIDDED SAMPLE	9
9. TEST STORY	10
10. RESULTS	10
10.1. Presentation of the results	10
10.2. Comments	10
10.3. Electrical parameters parts biased ON : Group 1	13
10.3.1. <i>General measurements</i>	13
10.3.2. <i>Module 1</i>	14
10.3.3. <i>Module 2</i>	14
10.3.4. <i>Module 3</i>	15
10.3.5. <i>Module 4</i>	15
10.4. Electrical parameters parts biased OFF : Group 1.....	16
10.4.1. <i>General measurements</i>	16
10.4.2. <i>Module 1</i>	17
10.4.3. <i>Module 2</i>	17
10.4.4. <i>Module 3</i>	18
10.4.5. <i>Module 4</i>	18
10.5. Electrical parameters parts biased ON : Group 2	19
10.5.1. <i>General measurements</i>	19
10.5.2. <i>Module 1</i>	20
10.5.3. <i>Module 2</i>	21
10.5.4. <i>Module 3</i>	22
10.5.5. <i>Module 4</i>	23
10.6. Electrical parameters parts biased OFF : Group 2.....	24
10.6.1. <i>General measurements</i>	24
10.6.2. <i>Module 1</i>	25
10.6.3. <i>Module 2</i>	26
10.6.4. <i>Module 3</i>	27
10.6.5. <i>Module 4</i>	28
11. CONCLUSION.....	29
12. APPENDIX 1 TESTS RESULTS : GROUP 1	30
13. APPENDIX 2 TESTS RESULTS : GROUP 2	42

	<p align="center">TOTAL IRRADIATION DOSE TEST REPORT</p> <p align="center">RHRLVDS32 (DC0804A)</p>	<p>Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008</p> <p>Rev: 0</p>
---	--	---

FIGURES

Figure 1 : Bias Conditions.....	8
Figure 2 : Delidded sample	9



**TOTAL IRRADIATION DOSE
TEST REPORT**

RHRLVDS32 (DC0804A)

Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804
Date: May 22nd, 2008

Rev: 0

1. Introduction

This report includes test results of **RHRLVDS32**, a **High speed differential line receivers** from **ST Microelectronics** after submission to total irradiation dose testing.

2. Documents

2.1. Applicable documents

Technical Proposal : TRAD/P/STM/LVDS31-32/WF/030308.
ST Microelectronics ITP : BE/AU/07206ce02 of 01/06/2008.
Mail ST Microelectronics from Mr UGUEN of 04/08/2008 about the number of parts.
Mail ST Microelectronics from Mr UGUEN of 04/11/2008 about the bias condition.

2.2. Reference documents

Basic Specification : ESCC N° 22900 Issue 3 of March 2007.
Detail specification : SMD 5962-98652 Rev D of 08/25/2004.
Data Sheet : STLVD32B Rev 13 of August 2007 from ST Microelectronics.

3. Part Informations

PART IDENTIFICATION	
Type :	RHRLVDS32
Manufacturer :	ST Microelectronics
Function :	High speed differential line receivers
PARTS PROCUREMENT INFORMATIONS	
Packaging :	FP16
Date Code :	0804A
Sample size :	10 irradiated samples group 1 + 10 irradiated samples group 2 + 1 reference sample

4. Dosimetry and irradiation facility

IRRADIATION FACILITY					
Irradiation source :	⁶⁰ Co				
Source location :	CEA Saclay				
Irradiation equipment :	PAGURE				
Dosimetry equipment :	Ionizing chamber PTW				
IRRADIATION TIME LOG					
Total dose limit (krad(Si)):	100				
Level for measurement (krad(Si)) :	Group 1	0	20	40	60
	Group 2	0		80	100
Dose rate (krad(Si)/h) :	Group 1	17			
	Group 2	22			
ANNEALING TIME LOG*					
Annealing 25°C :	24 hours				
	48 hours				
	168 hours				
Annealing 100°C :	168 hours				

* Only for Group 2

5. Test equipment identification


COMPUTER	Po-te-wf-091 ; MI-UC009
REF. TEST BOARD	TRAD/CT1/E/RHRLVDS32/ZIP16/LP/0804 ; TRAD/CT1/R/DS031/DIL16/AC/0100 ; TRAD/CT2/R/DS031/DIL16/WF/1201
EQUIPMENT	MI-49 ; ME-46 ; MI-07 ; MI-34 ; MI-03 ; MI-25 ; MI-09 ; MI-02 ; MI-10 ; ME-35
TEST PROGRAM	rhrlvds32_te_0804_b6-v01.llb ; rhrlvds32_te_0804_b6-v02.llb ; rhrlvds32_te_0804_b3-v01.pas

6. Test parameters

PARAMETERS	SYMBOLS	TEST CONDITIONS
Ta= 25°C, unless otherwise specified		
Supply Current, No Load, Receivers Enabled	Icc	EN = EN! = GND ; inputs open
Supply Current, No Load, Receivers Disabled	Iccz	EN = GND ; EN! = Vcc ; inputs open
Input Clamp Voltage	VCL*	Icl = 18mA
Input High Voltage	Vih*	
Input Low Voltage	Vil*	
Input High Current	Iih*	Vin = 3.6V ; Vcc = 3.6V ; Enable pins
Input low Current	Iil*	Vin = 3.6V ; Vcc = 3.6V ; Enable pins
Enable Time Z to Low	tPZL*	Input pulse = 0V to 3V ; Vin = 1.5V ; Vout = 50% ; RL = 1k
Enable Time Z to High	tPZH*	Input pulse = 0V to 3V ; Vin = 1.5V ; Vout = 50% ; RL = 1k
Disable Time High to Z	tPHZ*	Input pulse = 0V to 3V ; Vin = 1.5V ; RL = 1k ; Vout = Voh-0.5V
Disable Time Low to Z	tPLZ*	Input pulse = 0V to 3V ; Vin = 1.5V ; RL = 1k ; Vout = Vol+0.5V
Output Short Circuit Current	Ios*	Enabled ; Vout = 0V
Differential Input High Threshold	Vth*	Vcm = +1.2V
Differential Input Low Threshold	Vtl*	Vcm = +1.2V
Input Current	Iip*	Vin = 2.4V ; VCC = 3.6V ; receivers inputs
Input Current	Iin*	VCC = 0 ; Vin = 3.6V ; all inputs
Output High Voltage	Voh*	Ioh = -0.4mA ; Vcc = 3V
Output Low Voltage	Vol*	Iol = 2mA ; Vcc = 3V
Output Tri-State Current	Ioz	Disabled ; Vout = 0 or Vcc
Propagation Delay, Differential, Low to High	tPLHD*	VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V
Propagation Delay, Differential, High to Low	tPHLD*	VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V
Differential Skew	tSKD*	VID = 200mV

* Measurements applicable only for the initial step, the final step and for the annealing step, compliant with the test plan.

NB : The input "E" is noted "E!".

	TOTAL IRRADIATION DOSE TEST REPORT RHRLVDS32 (DC0804A)	Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008 Rev: 0
---	---	---

ITP applicable issue :

Applying the procedure from TRAD SMQ documents, the ITPs are identified and their version handled according to applicable TRAD requirements.

The customer applicable ITP No. **BE/AU/07206ce02 of 01/06/2008** is re-identified by TRAD as following **ITP/RHRLVDS3X/0804/080408 Issue 1.**

7. Bias conditions

All components are biased under following conditions.

Parameters specified in the applicable ITP are measured on one component that is kept as REFERENCE and therefore is not irradiated.

PARTS IDENTIFICATION																					
Serial Number	Control	Sample Devices																			
Mark	39	40	41	42	43	44	45	46	47	48	49	50	51	99	100	101	102	103	104	105	106
Irr. Marking	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Biasing Mode	REF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
Group	1 & 2	1										2									

BIASING CONDITIONS

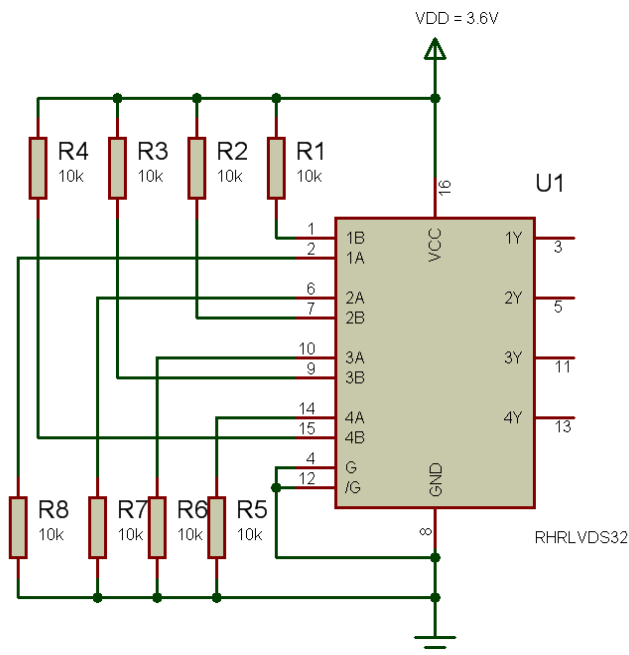


Figure 1 : Bias Conditions

COMMENTS	
Parts biased in static ON mode	10 (5 for the group 1 and 5 for the group 2)
Parts Grounded	10 (5 for the group 1 and 5 for the group 2)
Bias Board Ref	TRAD/CP1/E/RHRLVDS32/ZIP16/LP/0804 ; TRAD/CP2/E/RHRLVDS32/ZIP16/LP/0804
Bias Equipment	SM-29

8. Delidded Sample

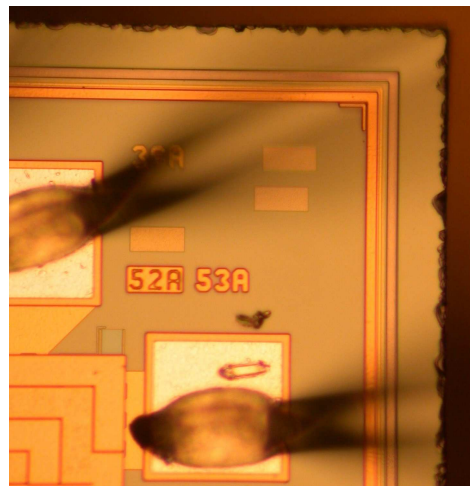
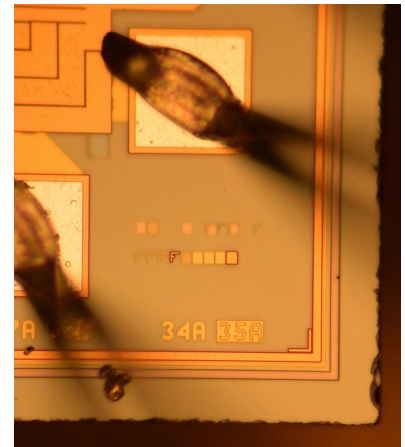
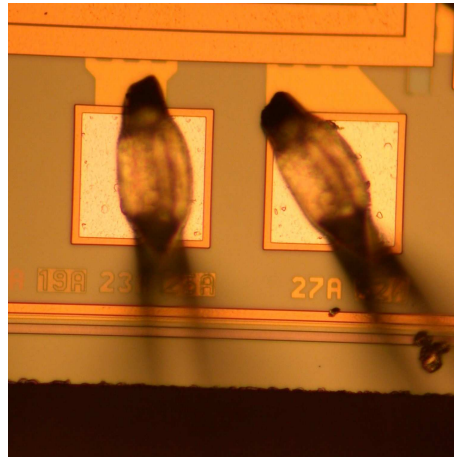
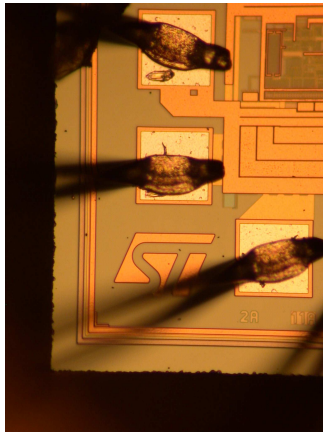
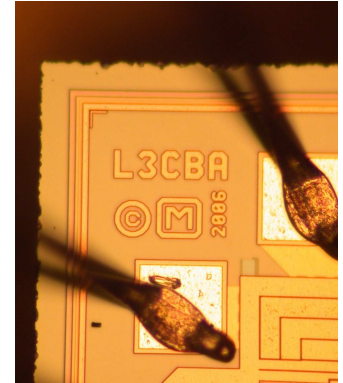
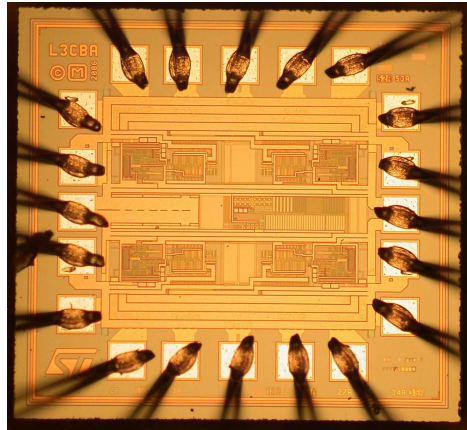



Figure 2 : Delidded sample

	<p align="center">TOTAL IRRADIATION DOSE TEST REPORT</p> <p align="center">RHRLVDS32 (DC0804A)</p>	<p>Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008</p> <p>Rev: 0</p>
---	--	---

9. Test Story

Test sequence, test and measurement conditions were nominal.

10. Results

10.1. Presentation of the results

For each parameter :

- The measurements performed at each irradiation step are registered in a table.
- Drifts between each measurement step and the "0" krad(Si) step are computed.

NB : * For the CTR and the Hfe parameters, the formula used is :

$$\text{Drift} = [\text{measurement}(X \text{ krad(Si)})]^{-1} - [\text{measurement}(0 \text{ krad(Si)})]^{-1}$$

* For the other measurements, the formula used is :

$$\text{Drift} = \text{measurement}(X \text{ krad(Si)}) - \text{measurement}(0 \text{ krad(Si)})$$

Where *X* stands for each measurement step.

10.2. Comments

Group 1 :

=> Electrical parameters parts biased ON :

Module 1

- The parameter Ioz_3.6V is out of specification at 47.6 krad(Si) by interpolation.

Module 2

- The parameter Ioz_3.6V is out of specification at 47.6 krad(Si) by interpolation.

Module 3


- The parameter Ioz_3.6V is out of specification at 48.1 krad(Si) by interpolation.

Module 4

- The parameter Ioz_3.6V is out of specification at 48.7 krad(Si) by interpolation.

=> Electrical parameters parts biased OFF :

- All parameters are within specifications at total dose level

	TOTAL IRRADIATION DOSE TEST REPORT RHRLVDS32 (DC0804A)	Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008 Rev: 0
---	---	---

Group 2 :

=> Electrical parameters parts biased ON :

General measurements

- The parameter tPHZ_E is out of specification at 86.2 krad(Si) by interpolation.
- The parameter tPLZ_E is out of specification at 86.2 krad(Si) by interpolation.
- The parameter tPLZ_E! is out of specification at 86.5 krad(Si) by interpolation.
- The parameter tPHZ_E! is out of specification at 86.6 krad(Si) by interpolation.
- The parameter tPZL_E! is out of specification at 88.9 krad(Si) by interpolation.
- The parameter tPZH_E! is out of specification at 89.3 krad(Si) by interpolation.
- The parameter tPZL_E is out of specification at 89.6 krad(Si) by interpolation.
- The parameter tPZH_E is out of specification at 90.1 krad(Si) by interpolation.

Module 1

- The parameter Ioz_3.6V is out of specification at 11.5 krad(Si) by interpolation.
- The parameter tPHLD is out of specification at 80.8 krad(Si) by interpolation.
- The parameter tPLHD is out of specification at 83.4 krad(Si) by interpolation.
- The parameter Ios is out of specification at 89.4 krad(Si) by interpolation.

Module 2

- The parameter Ioz_3.6V is out of specification at 10.2 krad(Si) by interpolation.
- The parameter tPHLD is out of specification at 81.0 krad(Si) by interpolation.
- The parameter tPLHD is out of specification at 83.8 krad(Si) by interpolation.
- The parameter Ios is out of specification at 89.4 krad(Si) by interpolation.

Module 3

- The parameter Ioz_3.6V is out of specification at 11.1 krad(Si) by interpolation.
- The parameter tPHLD is out of specification at 81.0 krad(Si) by interpolation.
- The parameter tPLHD is out of specification at 83.5 krad(Si) by interpolation.
- The parameter Ios is out of specification at 89.4 krad(Si) by interpolation.

Module 4

- The parameter Ioz_3.6V is out of specification at 11.3 krad(Si) by interpolation.
- The parameter tPHLD is out of specification at 80.9 krad(Si) by interpolation.
- The parameter tPLHD is out of specification at 83.7 krad(Si) by interpolation.
- The parameter Ios is out of specification at 89.4 krad(Si) by interpolation.


=> Electrical parameters parts biased OFF :

General measurements

- The parameter tPHZ_E is out of specification at 86.2 krad(Si) by interpolation.
- The parameter tPLZ_E is out of specification at 86.2 krad(Si) by interpolation.
- The parameter tPLZ_E! is out of specification at 86.5 krad(Si) by interpolation.
- The parameter tPHZ_E! is out of specification at 86.6 krad(Si) by interpolation.
- The parameter tPZL_E! is out of specification at 88.9 krad(Si) by interpolation.
- The parameter tPZH_E! is out of specification at 89.3 krad(Si) by interpolation.
- The parameter tPZL_E is out of specification at 89.6 krad(Si) by interpolation.
- The parameter tPZH_E is out of specification at 90.1 krad(Si) by interpolation.

Module 1

- The parameter tPHLD is out of specification at 80.8 krad(Si) by interpolation.
- The parameter tPLHD is out of specification at 83.4 krad(Si) by interpolation.
- The parameter Ios is out of specification at 88.7 krad(Si) by interpolation.

	<p align="center">TOTAL IRRADIATION DOSE TEST REPORT</p> <p align="center">RHRLVDS32 (DC0804A)</p>	<p>Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008</p> <p>Rev: 0</p>
---	--	---

Module 2

- The parameter tPHLD is out of specification at 81.0 krad(Si) by interpolation.
- The parameter tPLHD is out of specification at 83.7 krad(Si) by interpolation

Module 3

- The parameter tPHLD is out of specification at 81.0 krad(Si) by interpolation.
- The parameter tPLHD is out of specification at 83.6 krad(Si) by interpolation.
- The parameter Ios is out of specification at 88.7 krad(Si) by interpolation.

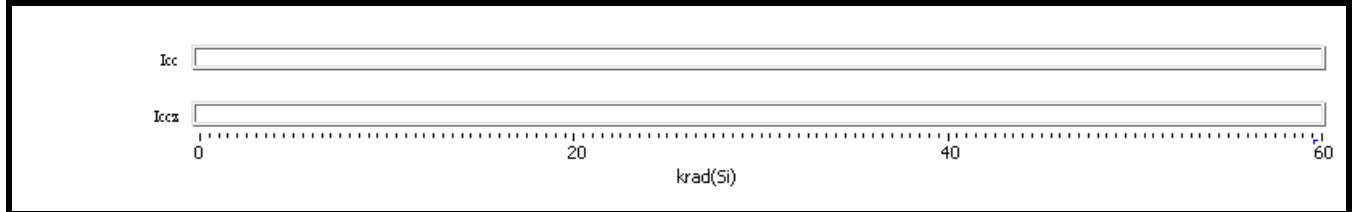
Module 4

- The parameter tPLHD is out of specification at 83.7 krad(Si) by interpolation.
- The parameter Ios is out of specification at 88.7 krad(Si) by interpolation.

The evolution of each parameter versus accumulated total dose is registered in the following pages.

10.3. Electrical parameters parts biased ON : Group 1

10.3.1. General measurements



Within specification

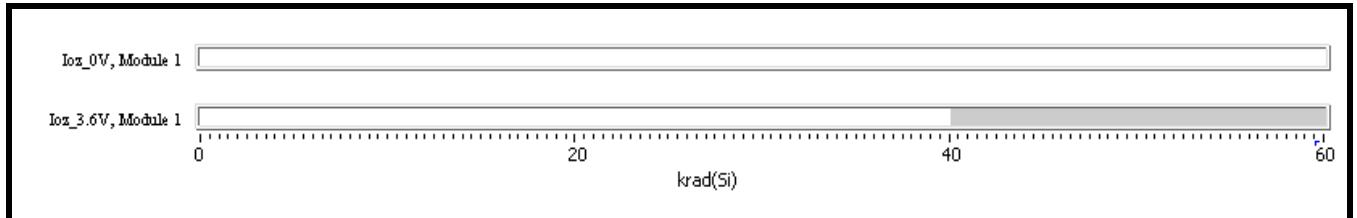


Transition



Out of specification parameter or parameter not measurable

10.3.2. Module 1



Within specification

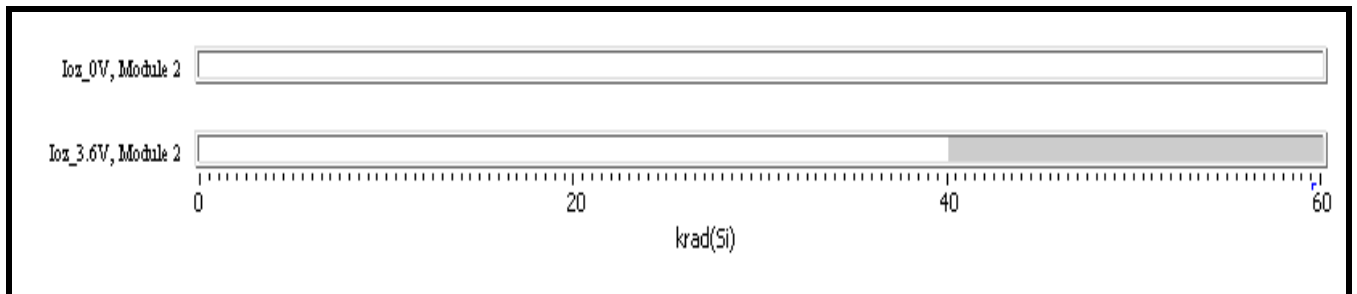


Transition



Out of specification parameter or parameter not measurable

10.3.3. Module 2



Within specification

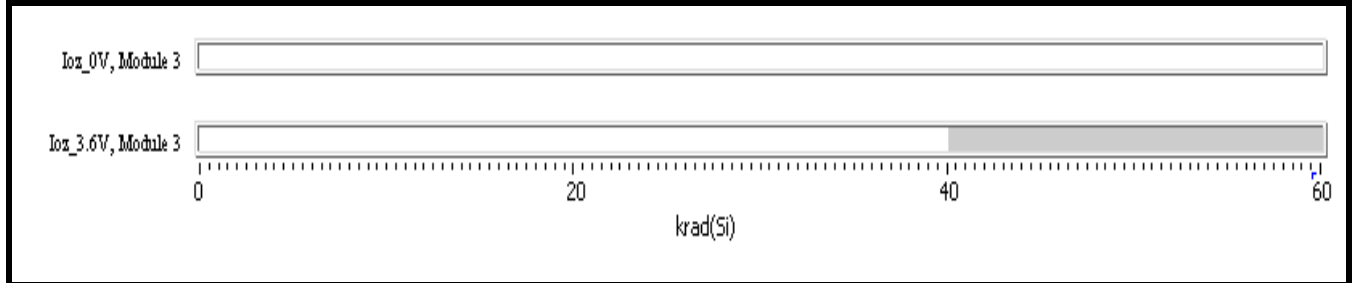


Transition



Out of specification parameter or parameter not measurable

10.3.4. Module 3



Within specification

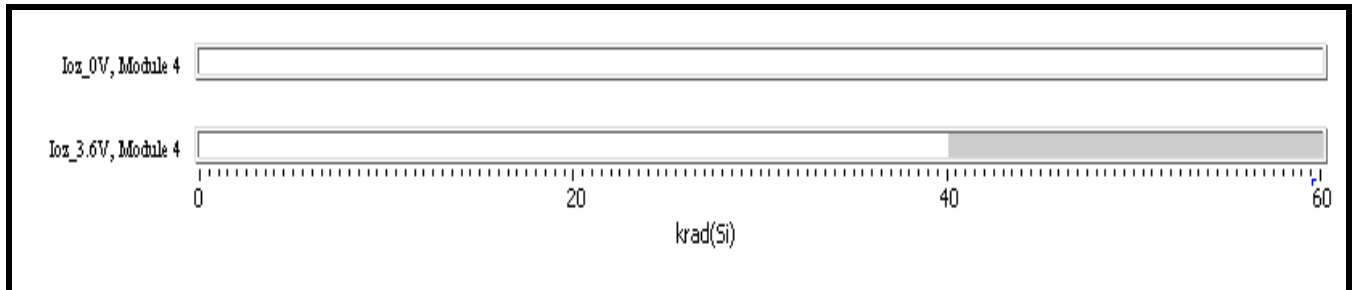


Transition



Out of specification parameter or parameter not measurable

10.3.5. Module 4



Within specification



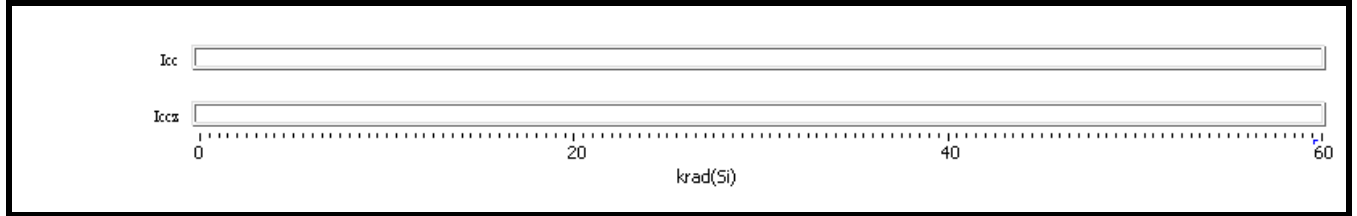
Transition



Out of specification parameter or parameter not measurable

10.4. Electrical parameters parts biased OFF : Group 1

10.4.1. General measurements



Within specification

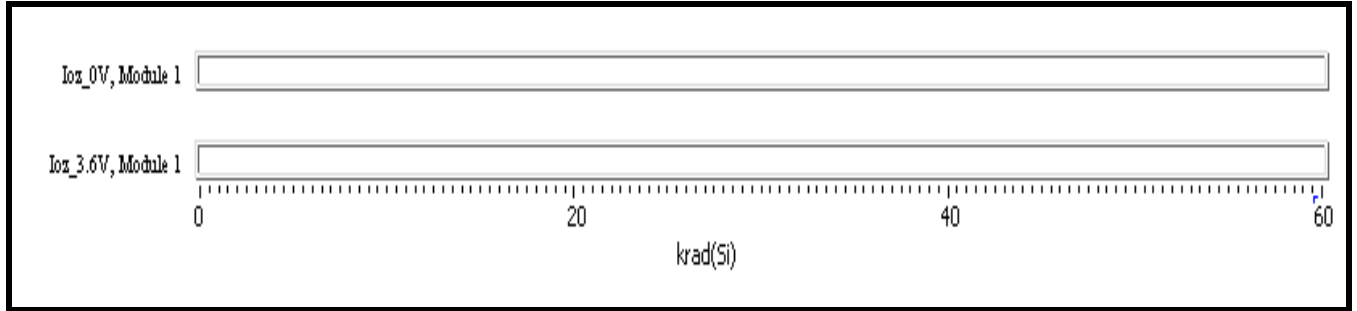


Transition



Out of specification parameter or parameter not measurable

10.4.2. Module 1



Within specification

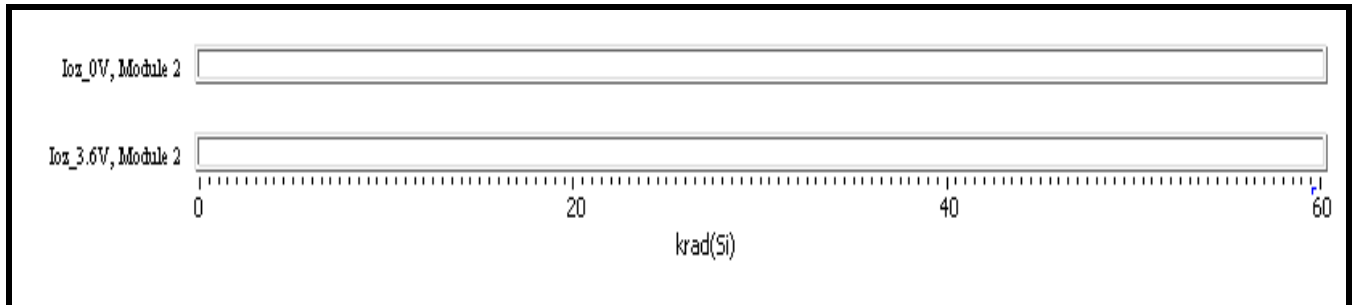


Transition



Out of specification parameter or parameter not measurable

10.4.3. Module 2



Within specification

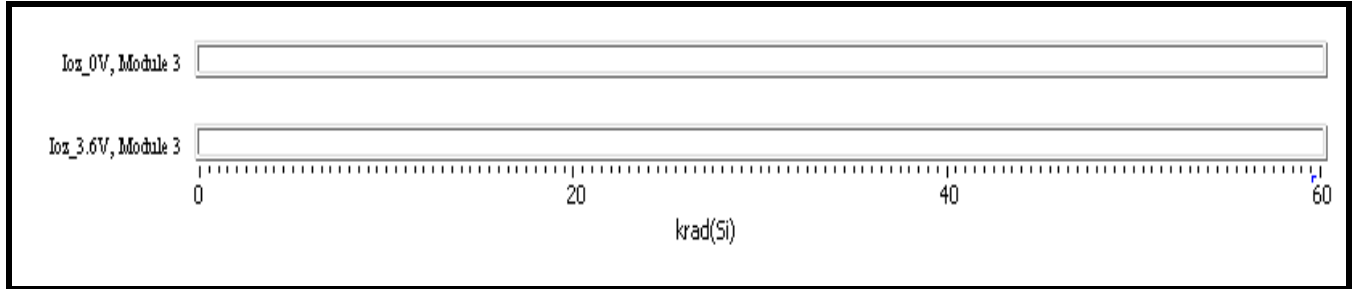


Transition



Out of specification parameter or parameter not measurable

10.4.4. Module 3



Within specification

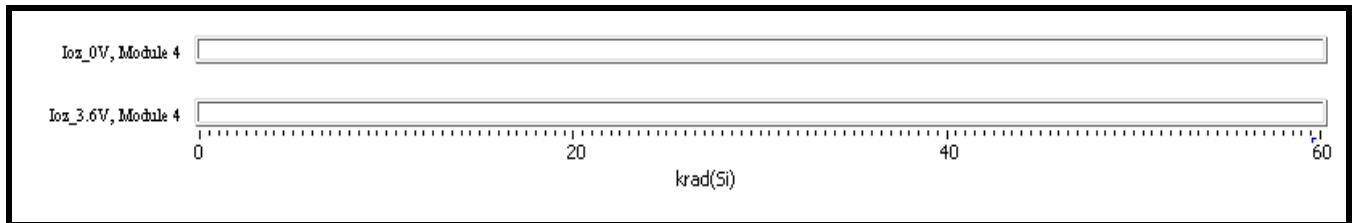


Transition



Out of specification parameter or parameter not measurable

10.4.5. Module 4



Within specification



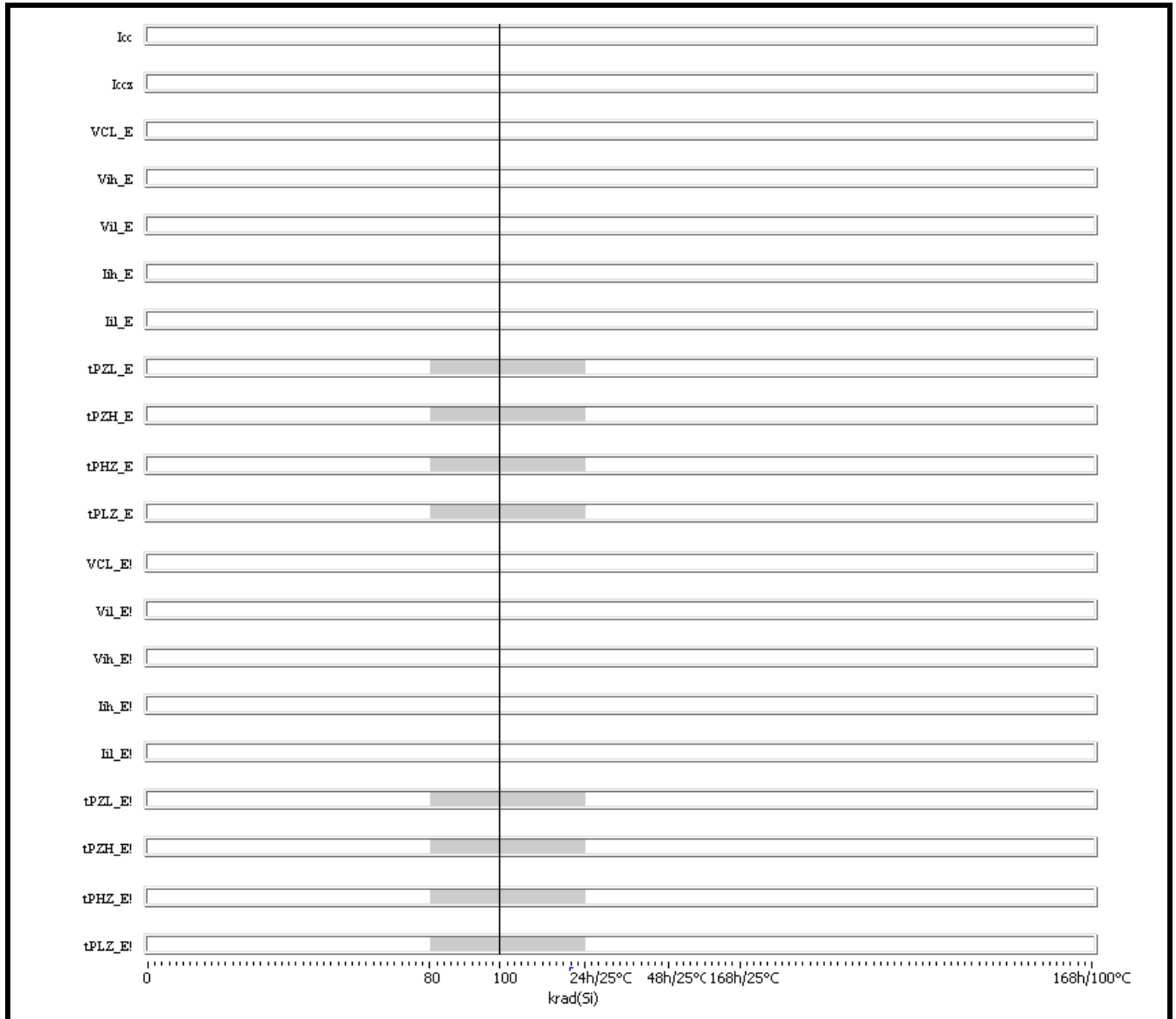
Transition



Out of specification parameter or parameter not measurable

10.5. Electrical parameters parts biased ON : Group 2

10.5.1. General measurements



Within specification

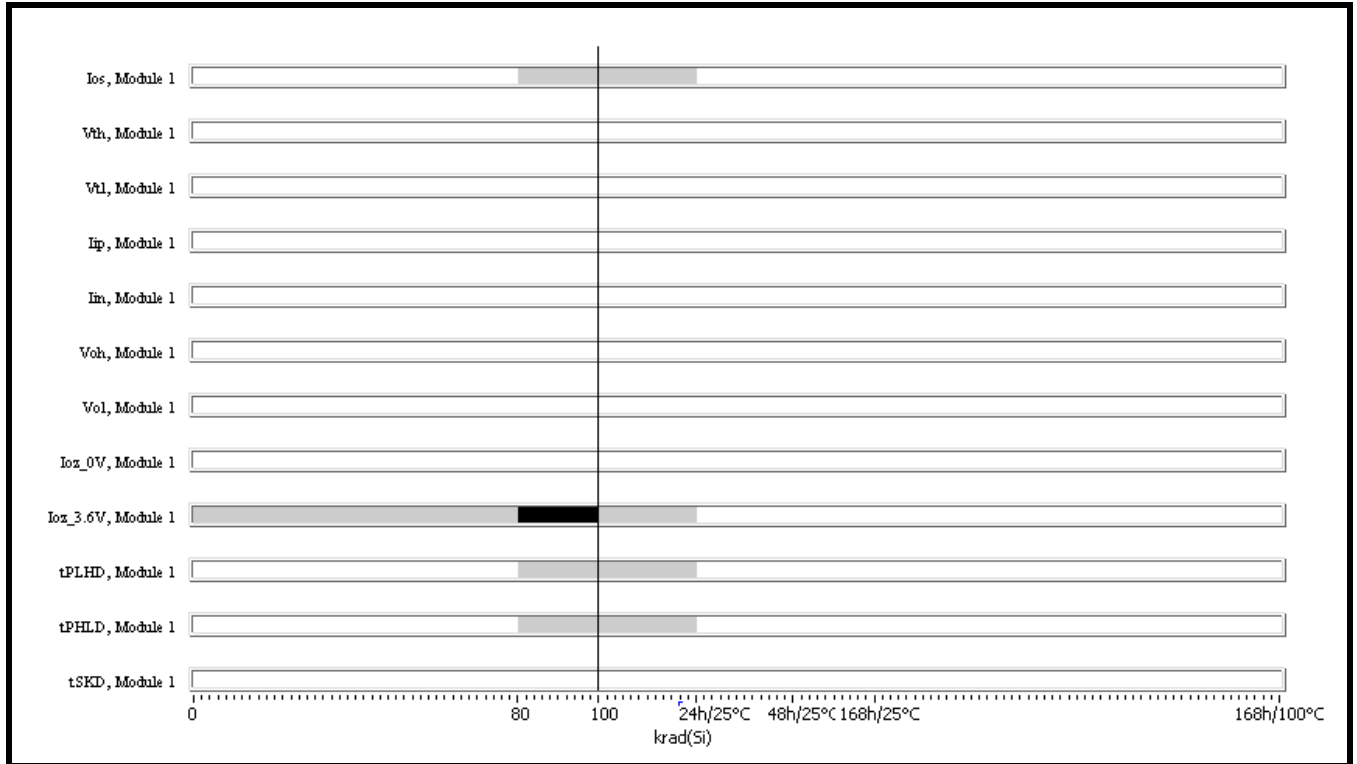


Transition



Out of specification parameter or parameter not measurable

10.5.2. Module 1



Within specification

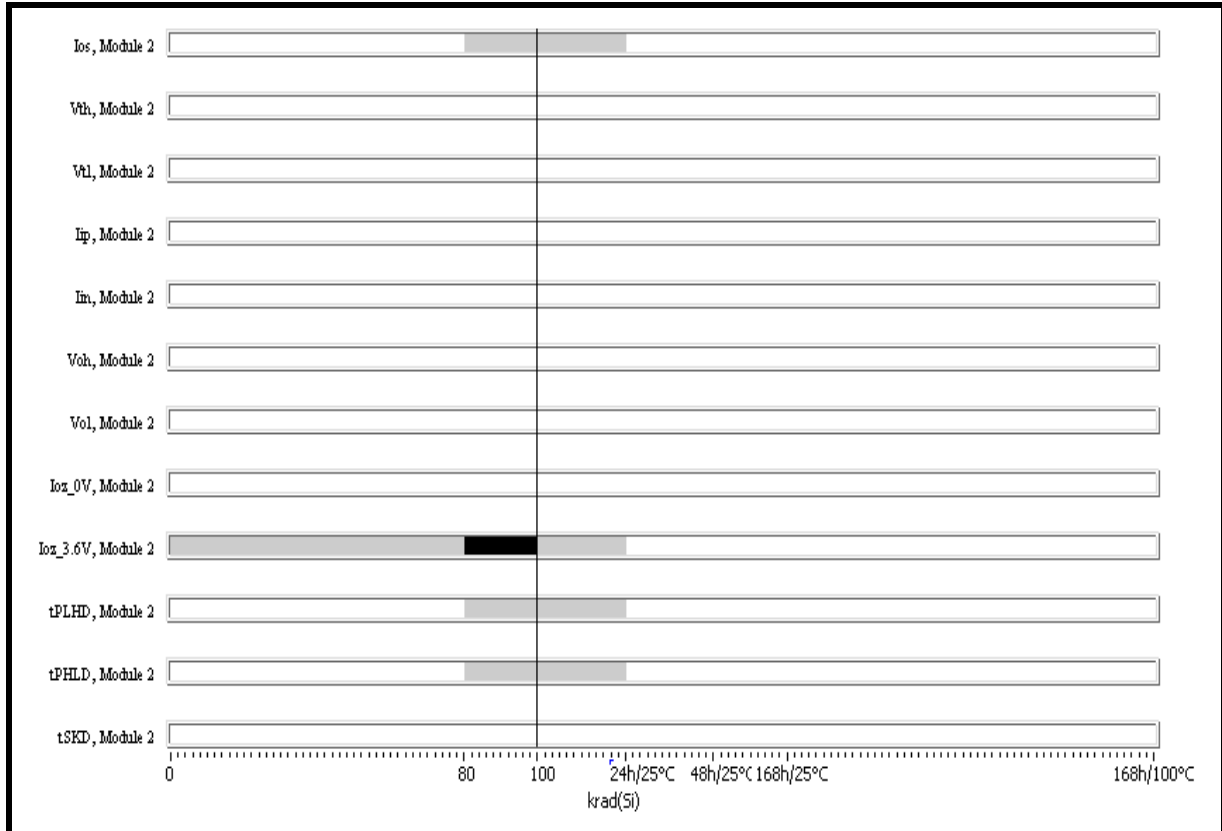


Transition



Out of specification parameter or parameter not measurable

10.5.3. Module 2



Within specification

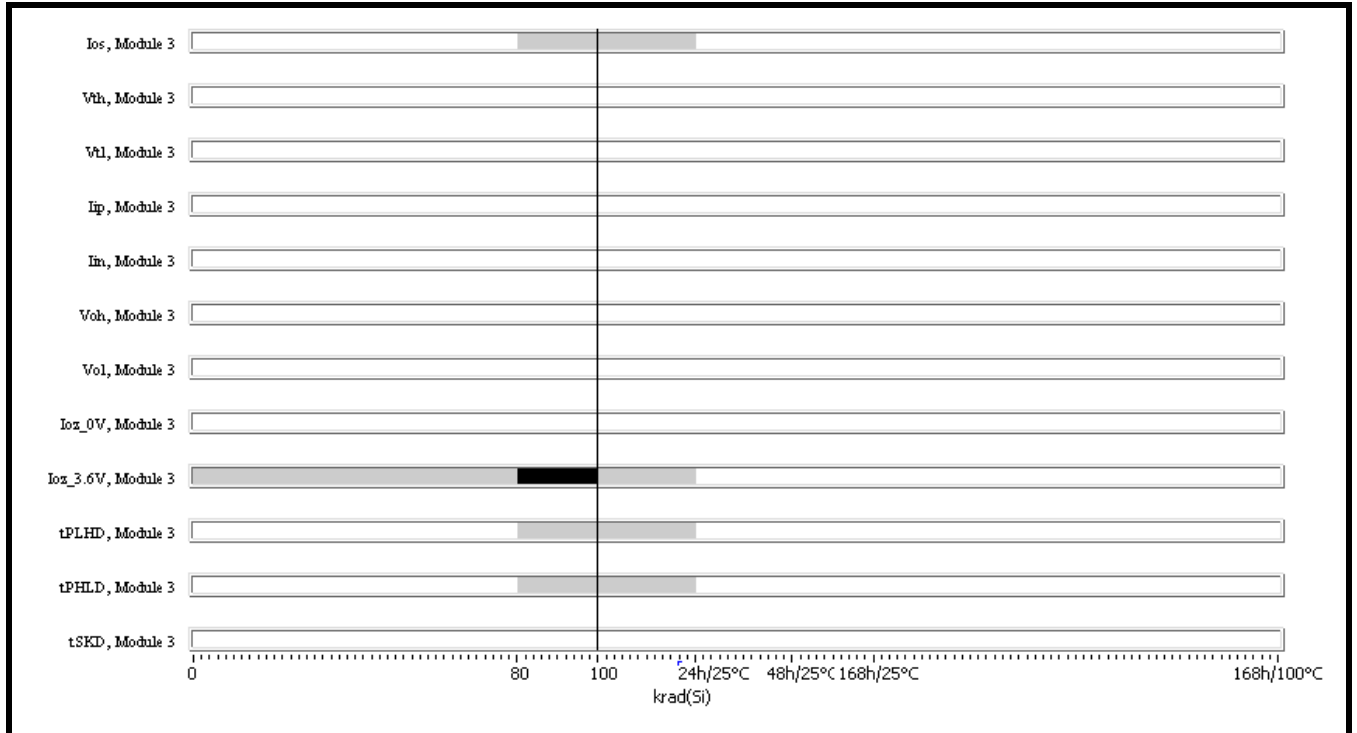


Transition



Out of specification parameter or parameter not measurable

10.5.4. Module 3



Within specification

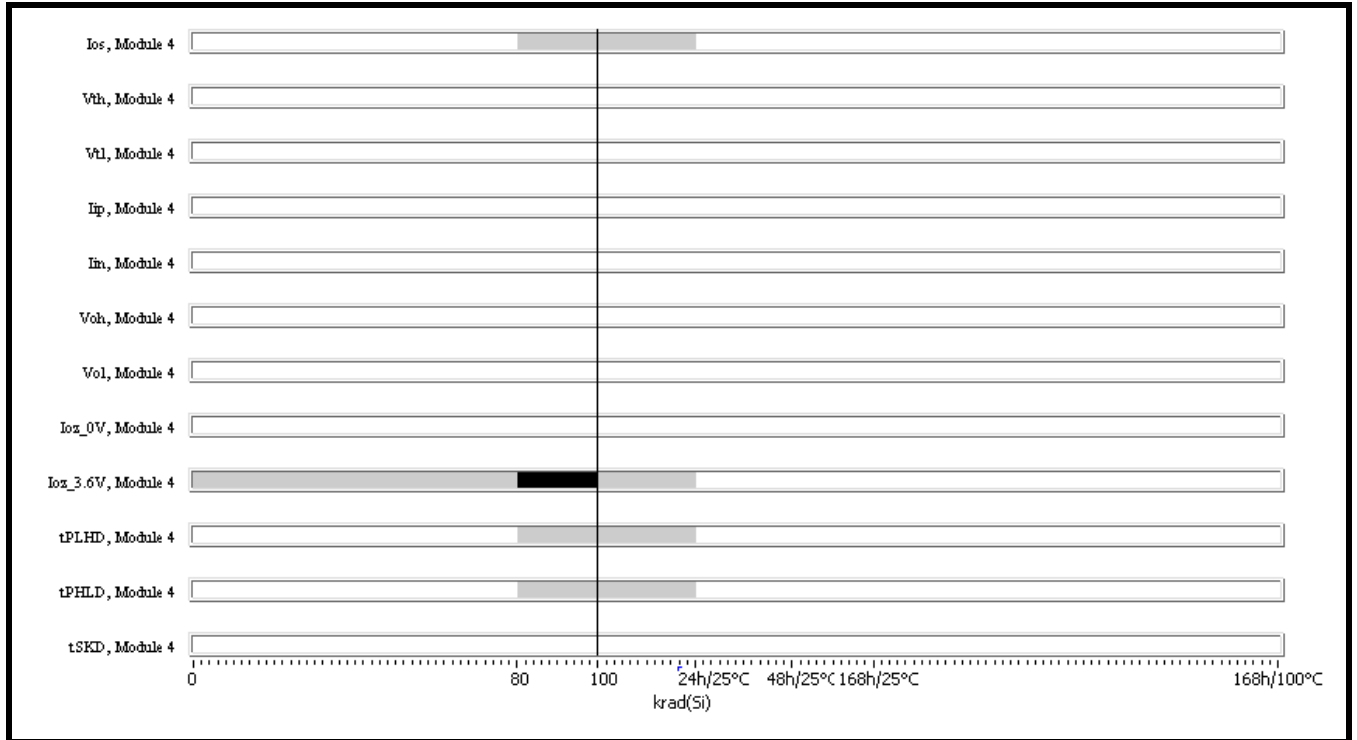


Transition



Out of specification parameter or parameter not measurable

10.5.5. Module 4



Within specification



Transition



Out of specification parameter or parameter not measurable

10.6. Electrical parameters parts biased OFF : Group 2

10.6.1. General measurements



Within specification

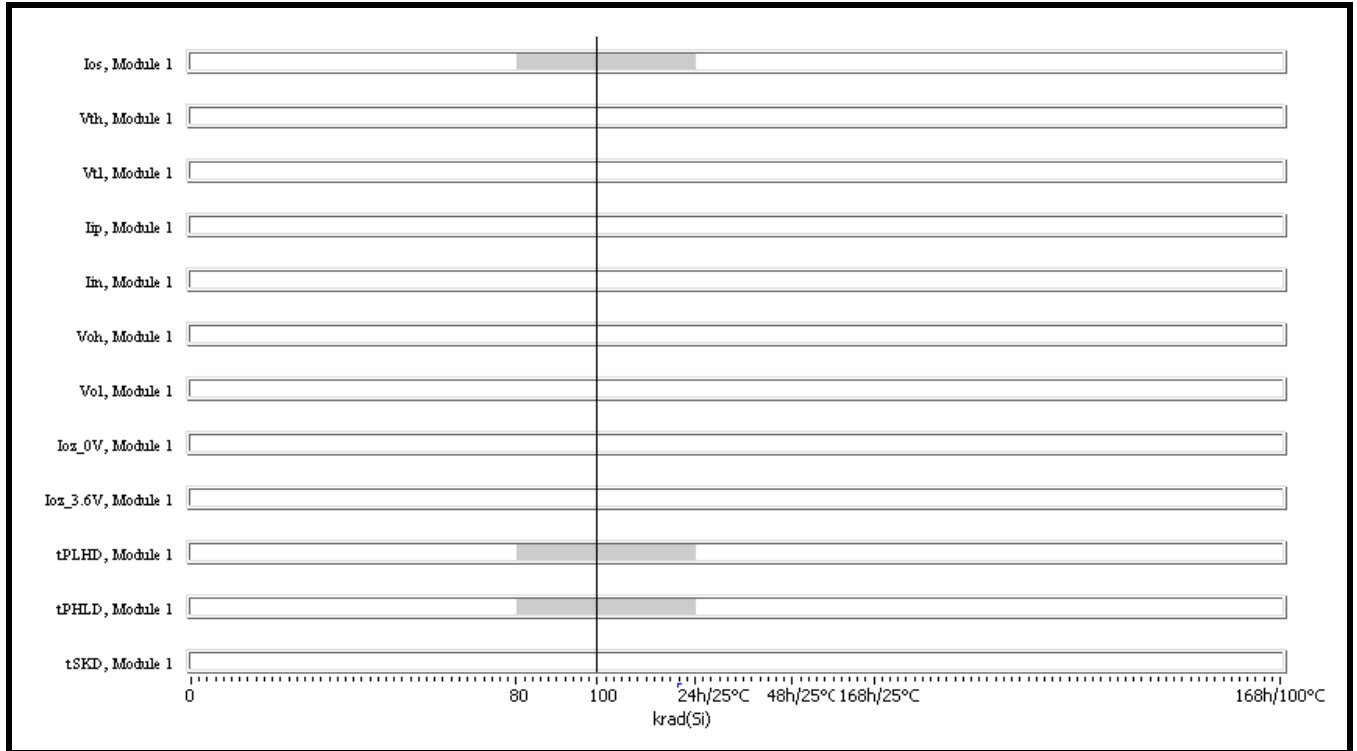


Transition



Out of specification parameter or parameter not measurable

10.6.2. Module 1



Within specification

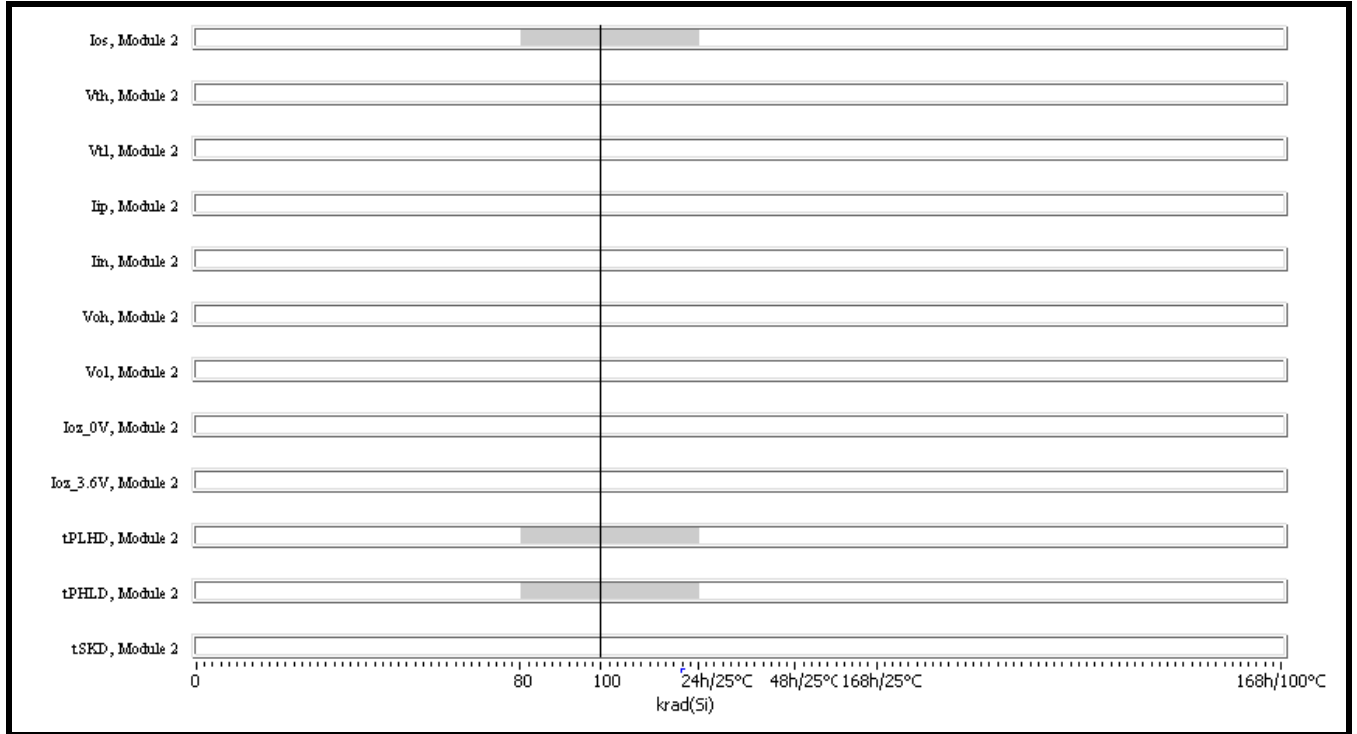


Transition



Out of specification parameter or parameter not measurable

10.6.3. Module 2



Within specification

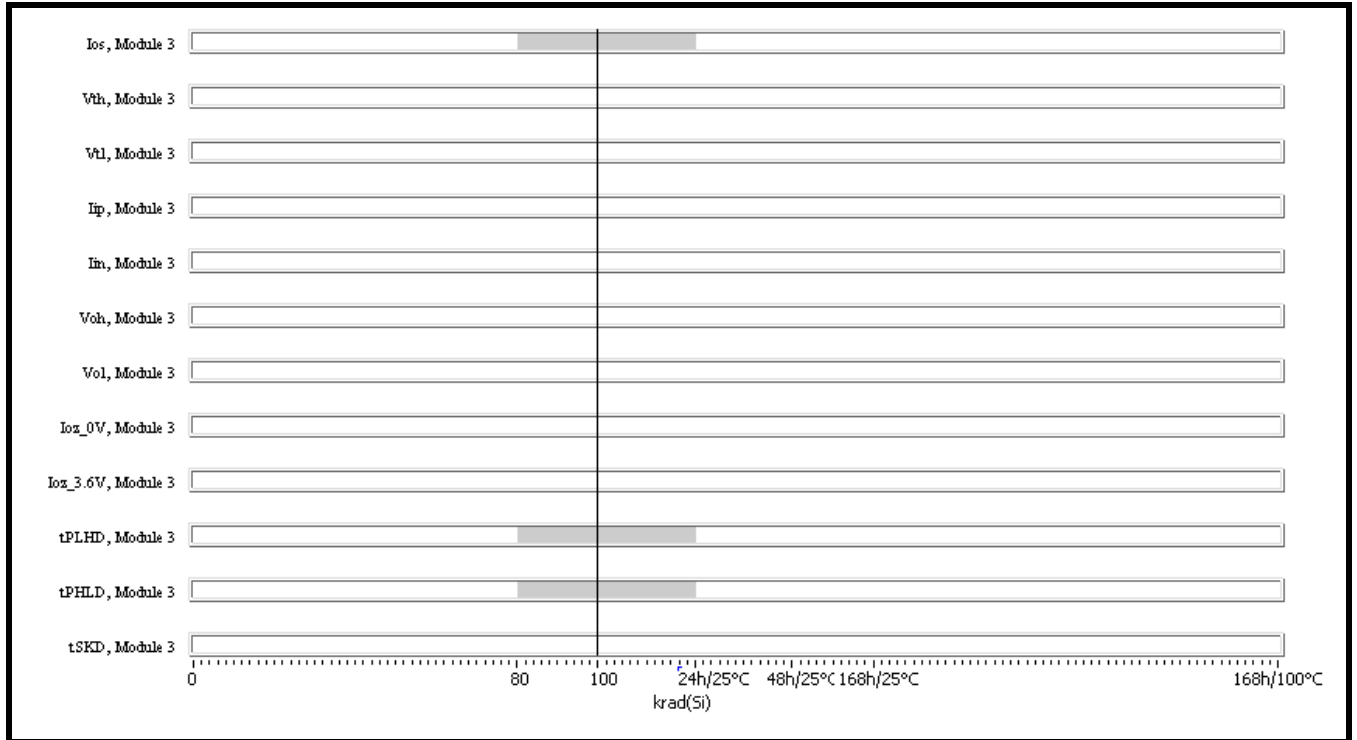


Transition



Out of specification parameter or parameter not measurable

10.6.4. Module 3



Within specification

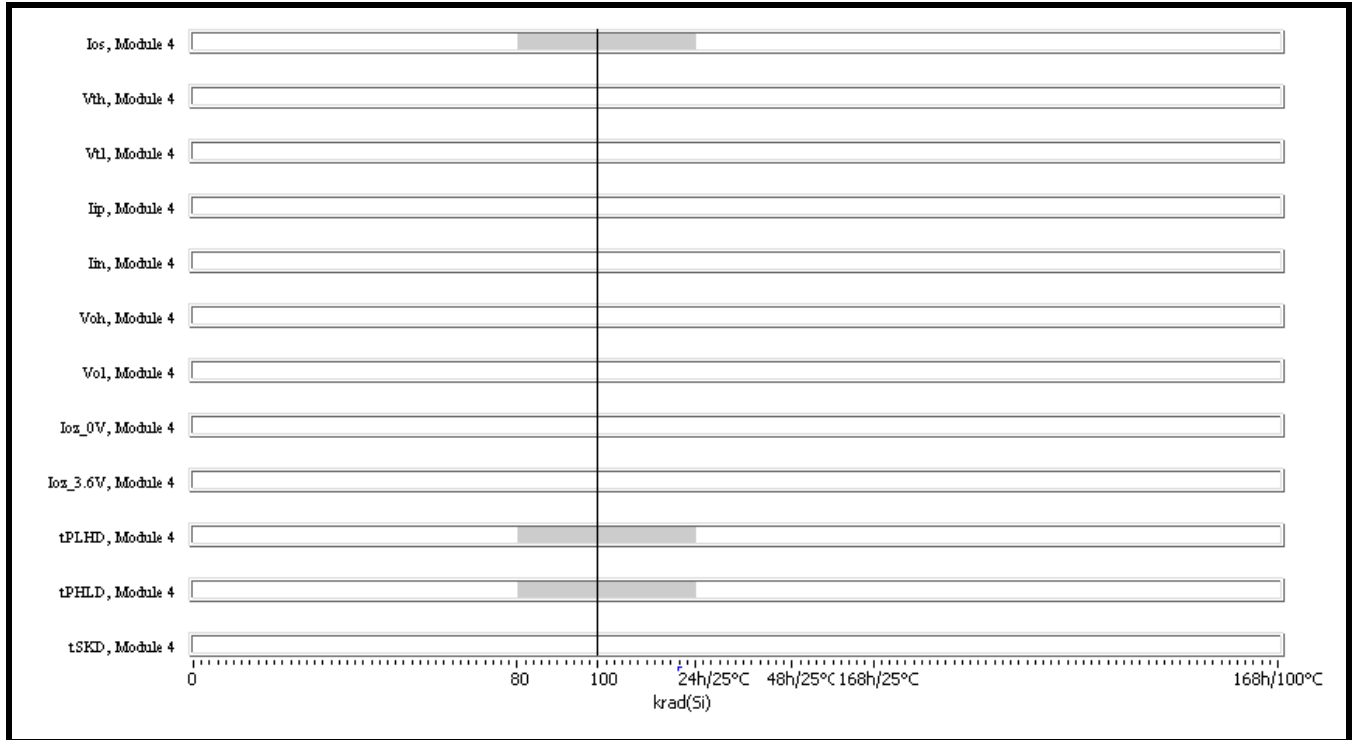


Transition



Out of specification parameter or parameter not measurable

10.6.5. Module 4




Within specification



Transition



Out of specification parameter or parameter not measurable


	<p style="text-align: center;">TOTAL IRRADIATION DOSE TEST REPORT</p> <p style="text-align: center;">RHRLVDS32 (DC0804A)</p>	<p>Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008</p> <p>Rev: 0</p>
---	--	---

11. Conclusion

Total dose steady-state irradiation test using gamma rays from Cobalt 60 source has been carried out on 20 **RHRLVDS32**, a **High speed differential line receivers** from **ST Microelectronics** up to 60 krad(Si) at high dose rate (17 krad(Si)/h) for the group 1 and up to 100krad(Si) at high dose rate (22krad(Si)/h) for the group 2.

Final test results are :

All devices are functional up to total dose level.

	TOTAL IRRADIATION DOSE TEST REPORT RHRLVDS32 (DC0804A)	Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008 Rev: 0
---	---	---

12. Appendix 1 Tests Results : Group 1



**TOTAL IRRADIATION DOSE
TEST REPORT**

RHRLVDS32 (DC0804A)

Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804

Date: May 22nd, 2008

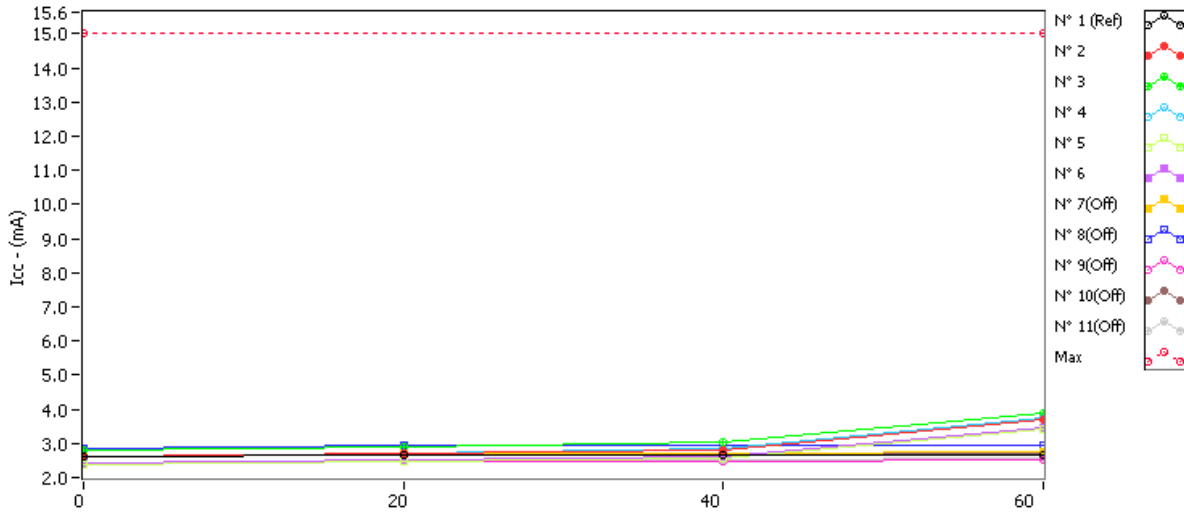
Rev: 0

Contents :

1	Icc	.....	A1-2
2	Iccz	.....	A1-3
3	Ioz_0V, Module 1	.....	A1-4
4	Ioz_0V, Module 2	.....	A1-5
5	Ioz_0V, Module 3	.....	A1-6
6	Ioz_0V, Module 4	.....	A1-7
7	Ioz_3.6V, Module 1	.....	A1-8
8	Ioz_3.6V, Module 2	.....	A1-9
9	Ioz_3.6V, Module 3	.....	A1-10
10	Ioz_3.6V, Module 4	.....	A1-11

1. Icc

"EN = EN! = GND or VCC ; inputs open"



Icc . (mA) Max = 15.0

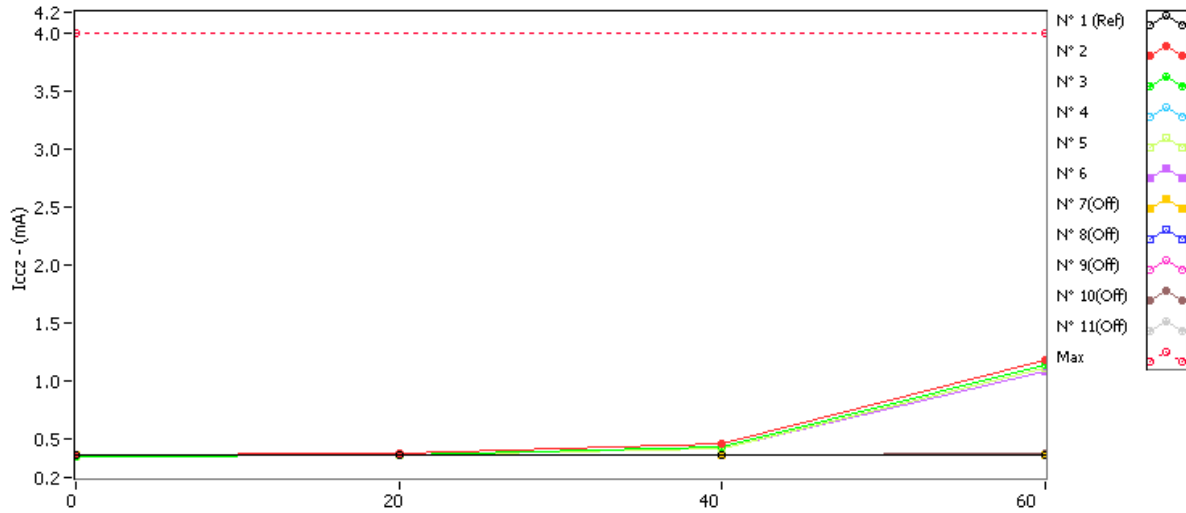
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	2.624	2.678	2.665	2.664
N° 2	2.592	2.690	2.814	3.707
N° 3	2.802	2.910	3.028	3.910
N° 4	2.614	2.724	2.830	3.736
N° 5	2.357	2.465	2.555	3.413
N° 6	2.442	2.524	2.603	3.447
N° 7(Off)	2.634	2.725	2.727	2.739
N° 8(Off)	2.826	2.932	2.935	2.954
N° 9(Off)	2.387	2.473	2.493	2.510
N° 10(Off)	2.591	2.676	2.693	2.705
N° 11(Off)	2.442	2.520	2.536	2.551

Delta [Icc]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	5.400E-2	4.100E-2	4.000E-2
N° 2	---	9.800E-2	2.220E-1	1.115E+0
N° 3	---	1.080E-1	2.260E-1	1.108E+0
N° 4	---	1.100E-1	2.160E-1	1.122E+0
N° 5	---	1.080E-1	1.980E-1	1.056E+0
N° 6	---	8.200E-2	1.610E-1	1.005E+0
N° 7(Off)	---	9.100E-2	9.300E-2	1.050E-1
N° 8(Off)	---	1.060E-1	1.090E-1	1.280E-1
N° 9(Off)	---	8.600E-2	1.060E-1	1.230E-1
N° 10(Off)	---	8.500E-2	1.020E-1	1.140E-1
N° 11(Off)	---	7.800E-2	9.400E-2	1.090E-1
Average	---	1.012E-1	2.046E-1	1.081E+0
s	---	1.171E-2	2.662E-2	4.992E-2
Average+3s	---	1.363E-1	2.845E-1	1.231E+0
Average-3s	---	6.606E-2	1.247E-1	9.314E-1

2. Iccz

"EN = GND ; EN! = Vcc ; inputs open"



Iccz . (mA) Max = 4.0

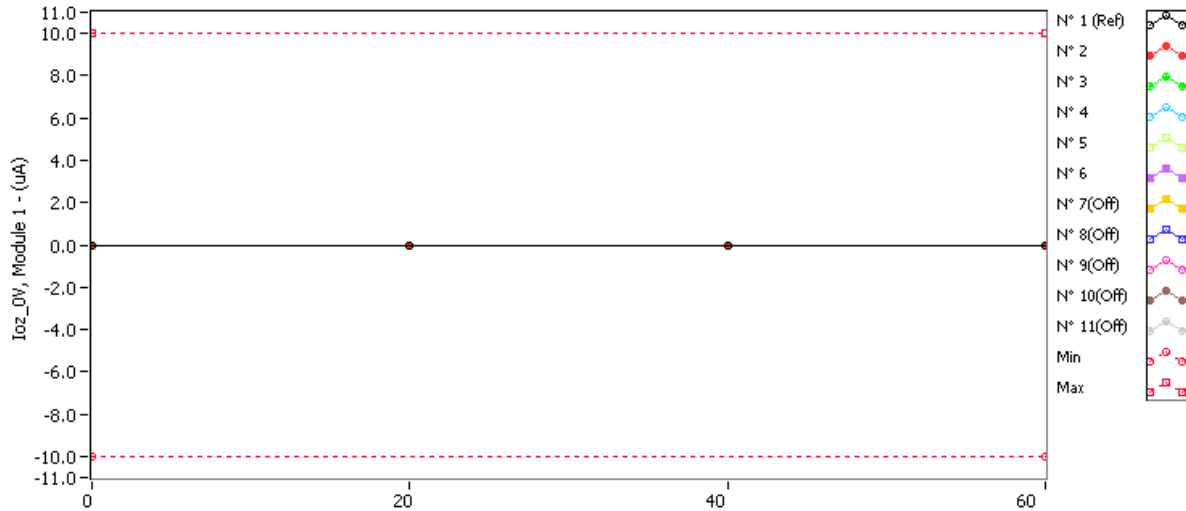
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	0.363	0.367	0.366	0.366
N° 2	0.369	0.373	0.459	1.178
N° 3	0.356	0.359	0.433	1.145
N° 4	0.360	0.365	0.435	1.148
N° 5	0.352	0.357	0.420	1.113
N° 6	0.355	0.359	0.418	1.091
N° 7(Off)	0.366	0.370	0.370	0.371
N° 8(Off)	0.364	0.368	0.368	0.369
N° 9(Off)	0.359	0.363	0.364	0.364
N° 10(Off)	0.366	0.370	0.371	0.371
N° 11(Off)	0.363	0.367	0.367	0.368

Delta [Iccz]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	4.000E-3	3.000E-3	3.000E-3
N° 2	---	4.000E-3	9.000E-2	8.090E-1
N° 3	---	3.000E-3	7.700E-2	7.890E-1
N° 4	---	5.000E-3	7.500E-2	7.880E-1
N° 5	---	5.000E-3	6.800E-2	7.610E-1
N° 6	---	4.000E-3	6.300E-2	7.360E-1
N° 7(Off)	---	4.000E-3	4.000E-3	5.000E-3
N° 8(Off)	---	4.000E-3	4.000E-3	5.000E-3
N° 9(Off)	---	4.000E-3	5.000E-3	5.000E-3
N° 10(Off)	---	4.000E-3	5.000E-3	5.000E-3
N° 11(Off)	---	4.000E-3	4.000E-3	5.000E-3
Average	---	4.200E-3	7.460E-2	7.766E-1
s	---	8.367E-4	1.026E-2	2.840E-2
Average+3s	---	6.710E-3	1.054E-1	8.618E-1
Average-3s	---	1.690E-3	4.382E-2	6.914E-1

3. Ioz_0V, Module 1

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 1 . (uA)

Min = -10.0 Max = 10.0

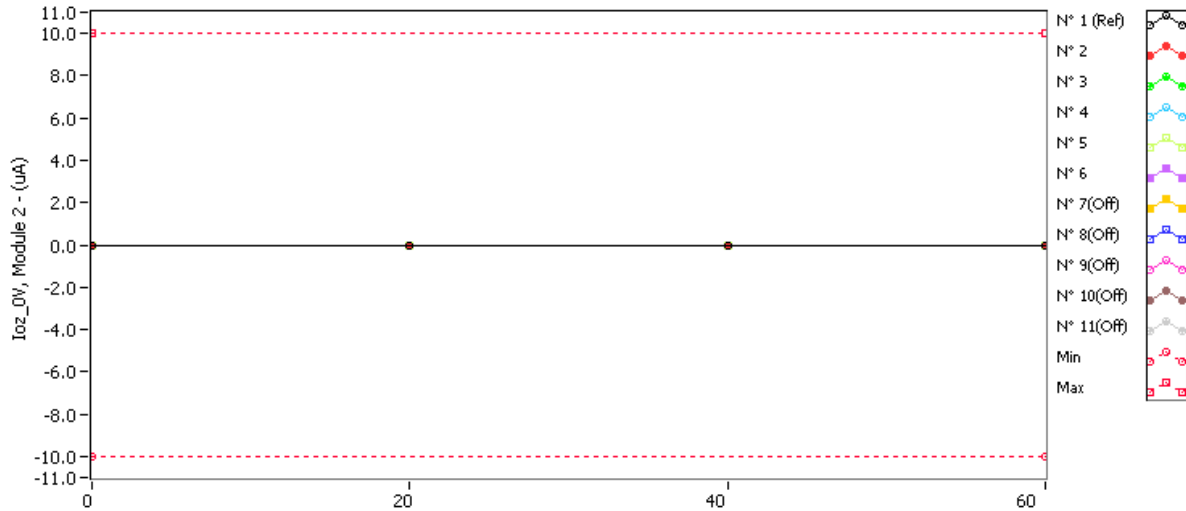
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	-0.000093	-0.000085	-0.000087	-0.000087
N° 2	-0.000106	-0.000095	-0.002069	-0.028178
N° 3	-0.000104	-0.000095	-0.001973	-0.024872
N° 4	-0.000094	-0.000088	-0.002007	-0.025740
N° 5	-0.000101	-0.000086	-0.002619	-0.028442
N° 6	-0.000093	-0.000085	-0.002051	-0.025304
N° 7(Off)	-0.000092	-0.000088	-0.000088	-0.000100
N° 8(Off)	-0.000091	-0.000086	-0.000087	-0.000084
N° 9(Off)	-0.000093	-0.000086	-0.000089	-0.000089
N° 10(Off)	-0.000091	-0.000087	-0.000089	-0.000089
N° 11(Off)	-0.000096	-0.000088	-0.000087	-0.000087

Delta [Ioz_0V, Module 1]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	8.000E-6	6.000E-6	6.000E-6
N° 2	---	1.100E-5	-1.963E-3	-2.807E-2
N° 3	---	9.000E-6	-1.869E-3	-2.477E-2
N° 4	---	6.000E-6	-1.913E-3	-2.565E-2
N° 5	---	1.500E-5	-2.518E-3	-2.834E-2
N° 6	---	8.000E-6	-1.958E-3	-2.521E-2
N° 7(Off)	---	4.000E-6	4.000E-6	-8.000E-6
N° 8(Off)	---	5.000E-6	4.000E-6	7.000E-6
N° 9(Off)	---	7.000E-6	4.000E-6	4.000E-6
N° 10(Off)	---	4.000E-6	2.000E-6	2.000E-6
N° 11(Off)	---	8.000E-6	9.000E-6	9.000E-6
Average	---	9.800E-6	-2.044E-3	-2.641E-2
s	---	3.421E-6	2.676E-4	1.674E-3
Average+3s	---	2.006E-5	-1.241E-3	-2.139E-2
Average-3s	---	-4.616E-7	-2.847E-3	-3.143E-2

4. Ioz_0V, Module 2

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 2 . (uA)

Min = -10.0 Max = 10.0

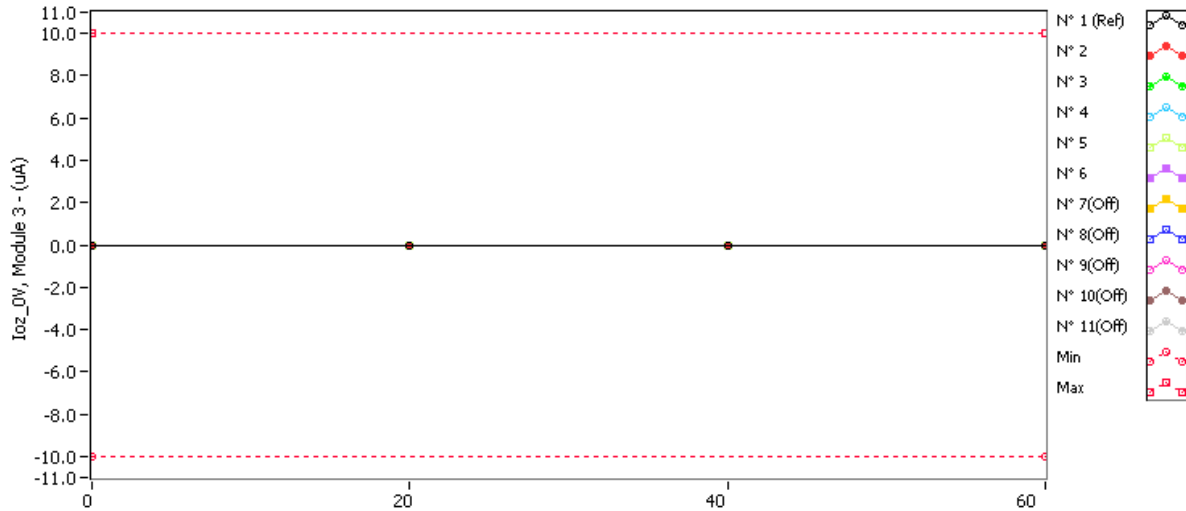
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	-0.000094	-0.000086	-0.000088	-0.000079
N° 2	-0.000103	-0.000096	-0.001739	-0.022258
N° 3	-0.000101	-0.000093	-0.001645	-0.020223
N° 4	-0.000096	-0.000086	-0.001606	-0.023723
N° 5	-0.000103	-0.000088	-0.000810	-0.018502
N° 6	-0.000088	-0.000087	-0.001269	-0.019389
N° 7(Off)	-0.000097	-0.000086	-0.000089	-0.000083
N° 8(Off)	-0.000090	-0.000087	-0.000090	-0.000092
N° 9(Off)	-0.000095	-0.000085	-0.000086	-0.000088
N° 10(Off)	-0.000094	-0.000086	-0.000087	-0.000087
N° 11(Off)	-0.000092	-0.000086	-0.000087	-0.000086

Delta [Ioz_0V, Module 2]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	8.000E-6	6.000E-6	1.500E-5
N° 2	---	7.000E-6	-1.636E-3	-2.216E-2
N° 3	---	8.000E-6	-1.544E-3	-2.012E-2
N° 4	---	1.000E-5	-1.510E-3	-2.363E-2
N° 5	---	1.500E-5	-7.070E-4	-1.840E-2
N° 6	---	1.000E-6	-1.181E-3	-1.930E-2
N° 7(Off)	---	1.100E-5	8.000E-6	1.400E-5
N° 8(Off)	---	3.000E-6	0.000E+0	-2.000E-6
N° 9(Off)	---	1.000E-5	9.000E-6	7.000E-6
N° 10(Off)	---	8.000E-6	7.000E-6	7.000E-6
N° 11(Off)	---	6.000E-6	5.000E-6	6.000E-6
Average	---	8.200E-6	-1.316E-3	-2.072E-2
s	---	5.070E-6	3.812E-4	2.137E-3
Average+3s	---	2.341E-5	-1.721E-4	-1.431E-2
Average-3s	---	-7.009E-6	-2.459E-3	-2.713E-2

5. Ioz_0V, Module 3

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 3 . (uA)

Min = -10.0 Max = 10.0

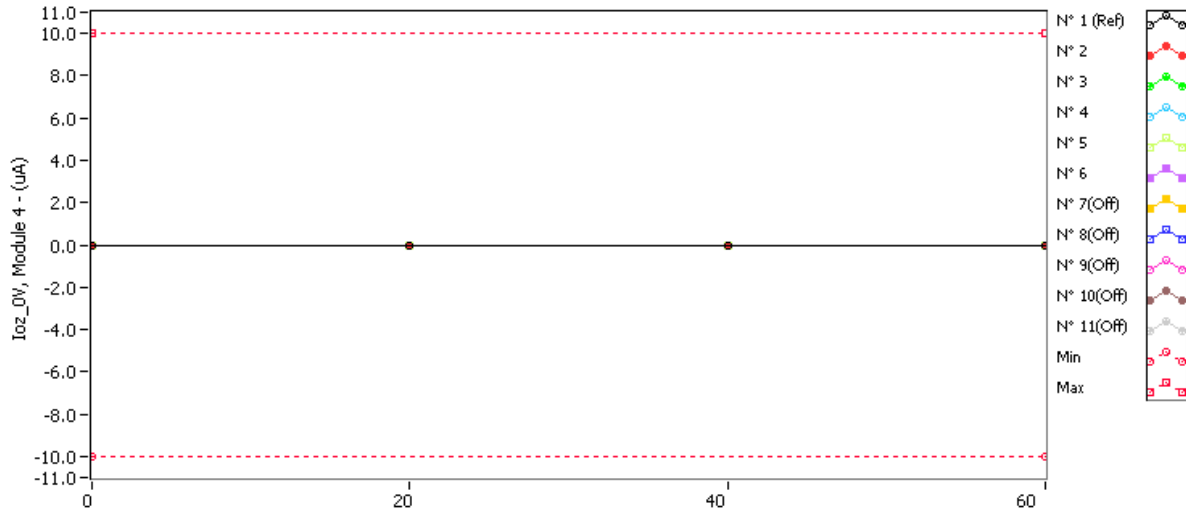
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	-0.000098	-0.000086	-0.000089	-0.000090
N° 2	-0.000111	-0.000100	-0.001549	-0.020659
N° 3	-0.000112	-0.000099	-0.001367	-0.020534
N° 4	-0.000098	-0.000086	-0.001320	-0.018977
N° 5	-0.000105	-0.000088	-0.000983	-0.016584
N° 6	-0.000092	-0.000092	-0.000857	-0.016865
N° 7(Off)	-0.000101	-0.000088	-0.000090	-0.000092
N° 8(Off)	-0.000097	-0.000088	-0.000089	-0.000085
N° 9(Off)	-0.000098	-0.000088	-0.000091	-0.000100
N° 10(Off)	-0.000094	-0.000087	-0.000090	-0.000090
N° 11(Off)	-0.000099	-0.000088	-0.000088	-0.000088

Delta [Ioz_0V, Module 3]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	1.200E-5	9.000E-6	8.000E-6
N° 2	---	1.100E-5	-1.438E-3	-2.055E-2
N° 3	---	1.300E-5	-1.255E-3	-2.042E-2
N° 4	---	1.200E-5	-1.222E-3	-1.888E-2
N° 5	---	1.700E-5	-8.780E-4	-1.648E-2
N° 6	---	0.000E+0	-7.650E-4	-1.677E-2
N° 7(Off)	---	1.300E-5	1.100E-5	9.000E-6
N° 8(Off)	---	9.000E-6	8.000E-6	1.200E-5
N° 9(Off)	---	1.000E-5	7.000E-6	-2.000E-6
N° 10(Off)	---	7.000E-6	4.000E-6	4.000E-6
N° 11(Off)	---	1.100E-5	1.100E-5	1.100E-5
Average	---	1.060E-5	-1.112E-3	-1.862E-2
s	---	6.348E-6	2.802E-4	1.938E-3
Average+3s	---	2.964E-5	-2.711E-4	-1.281E-2
Average-3s	---	-8.445E-6	-1.952E-3	-2.443E-2

6. Ioz_0V, Module 4

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 4 . (uA)

Min = -10.0 Max = 10.0

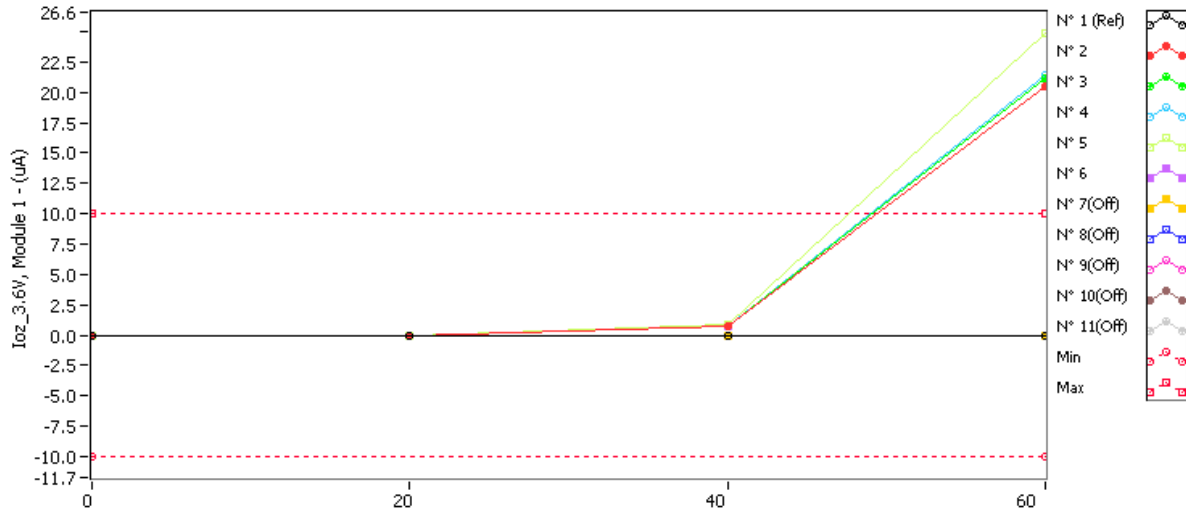
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	-0.000100	-0.000085	-0.000091	-0.000090
N° 2	-0.000110	-0.000097	-0.001020	-0.014511
N° 3	-0.000111	-0.000099	-0.000997	-0.013783
N° 4	-0.000095	-0.000089	-0.001060	-0.013921
N° 5	-0.000107	-0.000089	-0.000605	-0.011646
N° 6	-0.000095	-0.000089	-0.000688	-0.011352
N° 7(Off)	-0.000097	-0.000088	-0.000091	-0.000088
N° 8(Off)	-0.000098	-0.000089	-0.000090	-0.000095
N° 9(Off)	-0.000101	-0.000089	-0.000092	-0.000093
N° 10(Off)	-0.000098	-0.000088	-0.000090	-0.000090
N° 11(Off)	-0.000096	-0.000088	-0.000090	-0.000091

Delta [Ioz_0V, Module 4]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	1.500E-5	9.000E-6	1.000E-5
N° 2	---	1.300E-5	-9.100E-4	-1.440E-2
N° 3	---	1.200E-5	-8.860E-4	-1.367E-2
N° 4	---	6.000E-6	-9.650E-4	-1.383E-2
N° 5	---	1.800E-5	-4.980E-4	-1.154E-2
N° 6	---	6.000E-6	-5.930E-4	-1.126E-2
N° 7(Off)	---	9.000E-6	6.000E-6	9.000E-6
N° 8(Off)	---	9.000E-6	8.000E-6	3.000E-6
N° 9(Off)	---	1.200E-5	9.000E-6	8.000E-6
N° 10(Off)	---	1.000E-5	8.000E-6	8.000E-6
N° 11(Off)	---	8.000E-6	6.000E-6	5.000E-6
Average	---	1.100E-5	-7.704E-4	-1.294E-2
s	---	5.099E-6	2.100E-4	1.436E-3
Average+3s	---	2.630E-5	-1.404E-4	-8.630E-3
Average-3s	---	-4.297E-6	-1.400E-3	-1.725E-2

7. Ioz_3.6V, Module 1

"Disabled ; Vout = 0 or Vcc"



Ioz_3.6V, Module 1 . (uA)

Min = -10.0 Max = 10.0

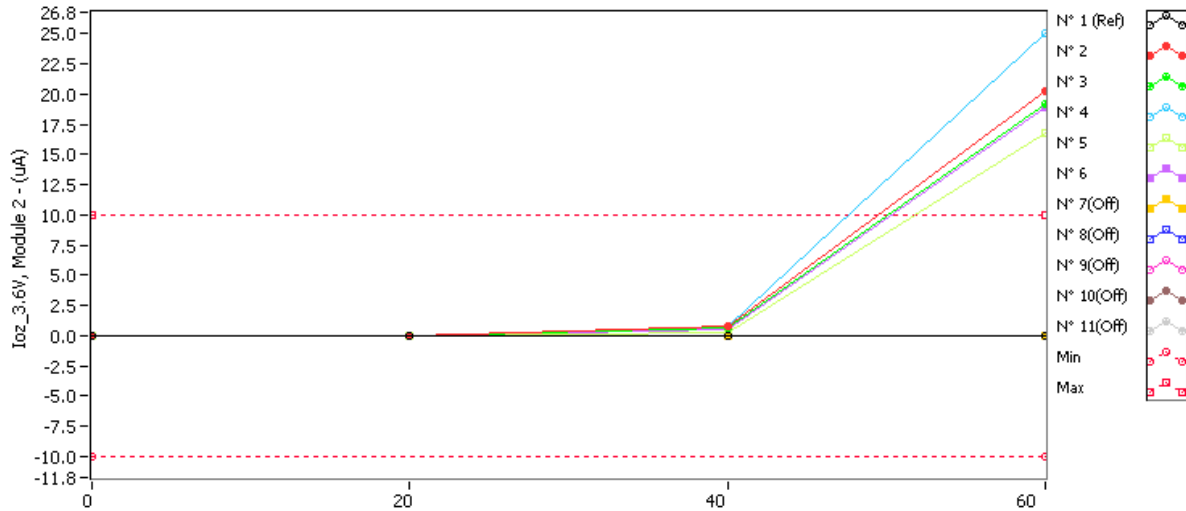
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	0.000051	0.000048	0.000026	0.000025
N° 2	0.000072	0.000065	0.676087	20.507100
N° 3	0.000087	0.000047	0.698916	21.158700
N° 4	0.000050	0.000024	0.731805	21.448300
N° 5	0.000064	0.000023	0.841246	24.862600
N° 6	0.000040	0.000020	0.783846	21.162400
N° 7(Off)	0.000189	0.000099	0.000117	0.000117
N° 8(Off)	0.000114	0.000059	0.000067	0.000083
N° 9(Off)	0.000050	0.000023	0.000028	0.000030
N° 10(Off)	0.000112	0.000053	0.000062	0.000064
N° 11(Off)	0.000038	0.000016	0.000019	0.000019

Delta [Ioz_3.6V, Module 1]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	-3.000E-6	-2.500E-5	-2.600E-5
N° 2	---	-7.000E-6	6.760E-1	2.051E+1
N° 3	---	-4.000E-5	6.988E-1	2.116E+1
N° 4	---	-2.600E-5	7.318E-1	2.145E+1
N° 5	---	-4.100E-5	8.412E-1	2.486E+1
N° 6	---	-2.000E-5	7.838E-1	2.116E+1
N° 7(Off)	---	-9.000E-5	-7.200E-5	-7.200E-5
N° 8(Off)	---	-5.500E-5	-4.700E-5	-3.100E-5
N° 9(Off)	---	-2.700E-5	-2.200E-5	-2.000E-5
N° 10(Off)	---	-5.900E-5	-5.000E-5	-4.800E-5
N° 11(Off)	---	-2.200E-5	-1.900E-5	-1.900E-5
Average	---	-2.680E-5	7.463E-1	2.183E+1
s	---	1.427E-5	6.674E-2	1.731E+0
Average+3s	---	1.602E-5	9.465E-1	2.702E+1
Average-3s	---	-6.962E-5	5.461E-1	1.663E+1

8. Ioz_3.6V, Module 2

"Disabled ; Vout = 0 or Vcc"



Ioz_3.6V, Module 2 . (uA)

Min = -10.0 Max = 10.0

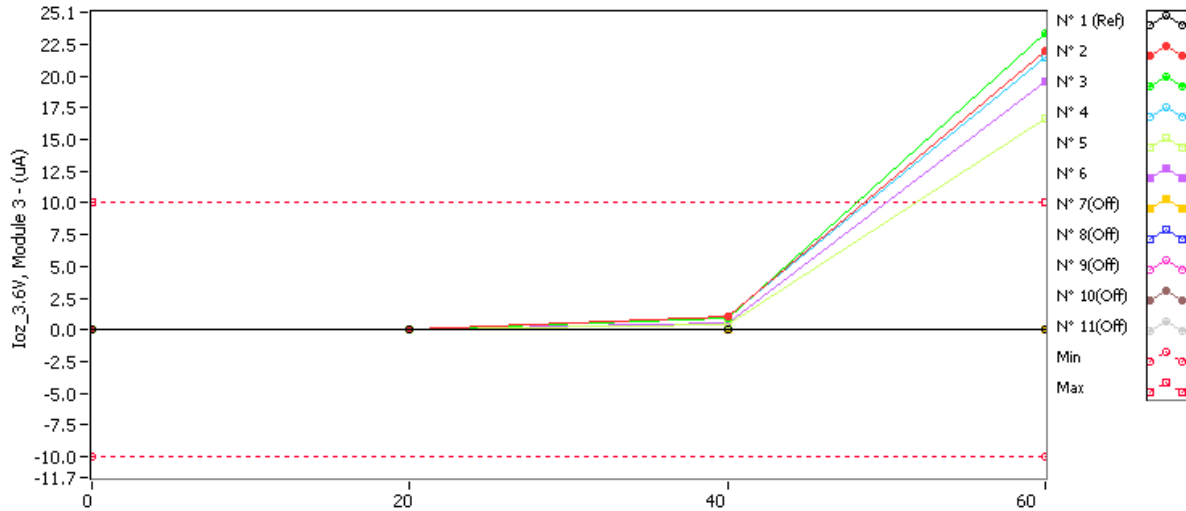
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	0.000047	0.000020	0.000024	0.000023
N° 2	0.000062	0.000037	0.792239	20.205300
N° 3	0.000057	0.000034	0.698560	19.183000
N° 4	0.000043	0.000020	0.827111	25.043700
N° 5	0.000062	0.000020	0.258724	16.846100
N° 6	0.000044	0.000017	0.547945	18.921500
N° 7(Off)	0.000041	0.000018	0.000023	0.000021
N° 8(Off)	0.000072	0.000037	0.000044	0.000043
N° 9(Off)	0.000059	0.000029	0.000035	0.000037
N° 10(Off)	0.000045	0.000020	0.000025	0.000025
N° 11(Off)	0.000041	0.000018	0.000023	0.000023

Delta [Ioz_3.6V, Module 2]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	-2.700E-5	-2.300E-5	-2.400E-5
N° 2	---	-2.500E-5	7.922E-1	2.021E+1
N° 3	---	-2.300E-5	6.985E-1	1.918E+1
N° 4	---	-2.300E-5	8.271E-1	2.504E+1
N° 5	---	-4.200E-5	2.587E-1	1.685E+1
N° 6	---	-2.700E-5	5.479E-1	1.892E+1
N° 7(Off)	---	-2.300E-5	-1.800E-5	-2.000E-5
N° 8(Off)	---	-3.500E-5	-2.800E-5	-2.900E-5
N° 9(Off)	---	-3.000E-5	-2.400E-5	-2.200E-5
N° 10(Off)	---	-2.500E-5	-2.000E-5	-2.000E-5
N° 11(Off)	---	-2.300E-5	-1.800E-5	-1.800E-5
Average	---	-2.800E-5	6.249E-1	2.004E+1
s	---	8.000E-6	2.315E-1	3.052E+0
Average+3s	---	-4.000E-6	1.319E+0	2.919E+1
Average-3s	---	-5.200E-5	-6.957E-2	1.088E+1

9. Ioz_3.6V, Module 3

"Disabled ; Vout = 0 or Vcc"



Ioz_3.6V, Module 3 . (uA)

Min = -10.0 Max = 10.0

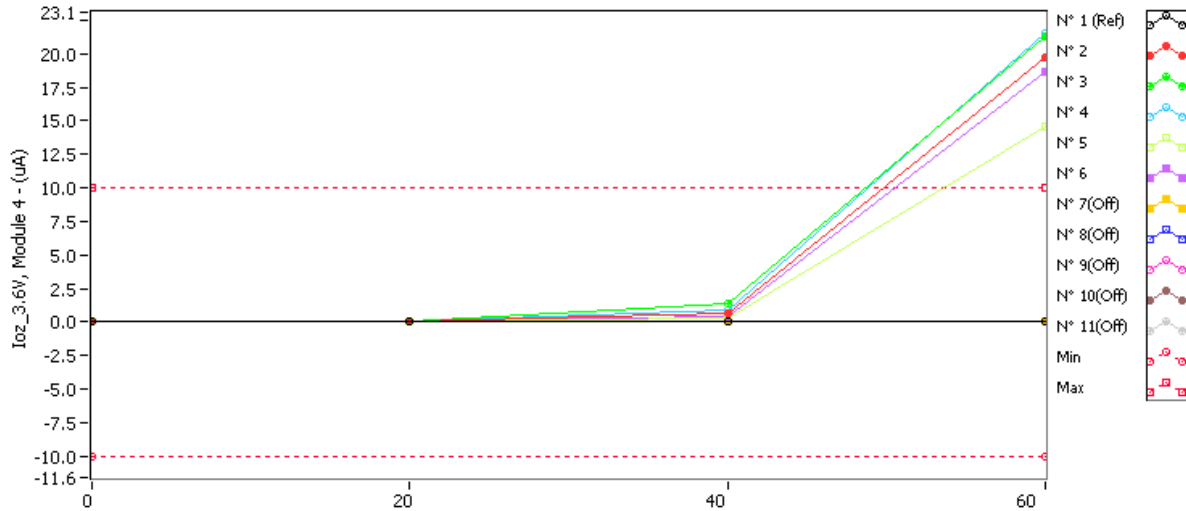
	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	0.000038	0.000015	0.000018	0.000019
N° 2	0.000073	0.000043	0.999450	21.957400
N° 3	0.000056	0.000035	0.945454	23.389500
N° 4	0.000041	0.000019	0.980891	21.465600
N° 5	0.000054	0.000018	0.464233	16.651800
N° 6	0.000040	0.000020	0.504141	19.651800
N° 7(Off)	0.000055	0.000027	0.000033	0.000034
N° 8(Off)	0.000045	0.000020	0.000025	0.000026
N° 9(Off)	0.000039	0.000016	0.000020	0.000028
N° 10(Off)	0.000038	0.000016	0.000020	0.000020
N° 11(Off)	0.000043	0.000019	0.000024	0.000023

Delta [Ioz_3.6V, Module 3]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	-2.300E-5	-2.000E-5	-1.900E-5
N° 2	---	-3.000E-5	9.994E-1	2.196E+1
N° 3	---	-2.100E-5	9.454E-1	2.339E+1
N° 4	---	-2.200E-5	9.808E-1	2.147E+1
N° 5	---	-3.600E-5	4.642E-1	1.665E+1
N° 6	---	-2.000E-5	5.041E-1	1.965E+1
N° 7(Off)	---	-2.800E-5	-2.200E-5	-2.100E-5
N° 8(Off)	---	-2.500E-5	-2.000E-5	-1.900E-5
N° 9(Off)	---	-2.300E-5	-1.900E-5	-1.100E-5
N° 10(Off)	---	-2.200E-5	-1.800E-5	-1.800E-5
N° 11(Off)	---	-2.400E-5	-1.900E-5	-2.000E-5
Average	---	-2.580E-5	7.788E-1	2.062E+1
s	---	6.943E-6	2.700E-1	2.591E+0
Average+3s	---	-4.972E-6	1.589E+0	2.840E+1
Average-3s	---	-4.663E-5	-3.133E-2	1.285E+1

10. Ioz_3.6V, Module 4

"Disabled ; Vout = 0 or Vcc"




Ioz_3.6V, Module 4 . (uA)

Min = -10.0 Max = 10.0

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	0.000067	0.000028	0.000040	0.000036
N° 2	0.000062	0.000036	0.665606	19.674600
N° 3	0.000056	0.000051	1.378000	21.272400
N° 4	0.000052	0.000026	0.883127	21.503100
N° 5	0.000092	0.000032	0.277674	14.581100
N° 6	0.000049	0.000026	0.452284	18.607900
N° 7(Off)	0.000047	0.000022	0.000027	0.000029
N° 8(Off)	0.000042	0.000019	0.000019	0.000024
N° 9(Off)	0.000043	0.000019	0.000023	0.000026
N° 10(Off)	0.000046	0.000020	0.000024	0.000025
N° 11(Off)	0.000039	0.000017	0.000021	0.000021

Delta [Ioz_3.6V, Module 4]

	0krad(Si)	20krad(Si)	40krad(Si)	60krad(Si)
N° 1 (Ref)	---	-3.900E-5	-2.700E-5	-3.100E-5
N° 2	---	-2.600E-5	6.655E-1	1.967E+1
N° 3	---	-5.000E-6	1.378E+0	2.127E+1
N° 4	---	-2.600E-5	8.831E-1	2.150E+1
N° 5	---	-6.000E-5	2.776E-1	1.458E+1
N° 6	---	-2.300E-5	4.522E-1	1.861E+1
N° 7(Off)	---	-2.500E-5	-2.000E-5	-1.800E-5
N° 8(Off)	---	-2.300E-5	-2.300E-5	-1.800E-5
N° 9(Off)	---	-2.400E-5	-2.000E-5	-1.700E-5
N° 10(Off)	---	-2.600E-5	-2.200E-5	-2.100E-5
N° 11(Off)	---	-2.200E-5	-1.800E-5	-1.800E-5
Average	---	-2.800E-5	7.313E-1	1.913E+1
s	---	1.991E-5	4.270E-1	2.806E+0
Average+3s	---	3.174E-5	2.012E+0	2.754E+1
Average-3s	---	-8.774E-5	-5.497E-1	1.071E+1

	TOTAL IRRADIATION DOSE TEST REPORT RHRLVDS32 (DC0804A)	Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804 Date: May 22nd, 2008 Rev: 0
---	---	---

13. Appendix 2 Tests Results : Group 2



**TOTAL IRRADIATION DOSE
TEST REPORT**

RHRLVDS32 (DC0804A)

Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804

Date: May 22nd, 2008

Rev: 0

Contents :

1	Icc	A2-3
2	Iccz	A2-4
3	VCL_E	A2-5
4	Vih_E	A2-6
5	Vil_E	A2-7
6	Iih_E	A2-8
7	Iil_E	A2-9
8	tPZL_E	A2-10
9	tPZH_E	A2-11
10	tPHZ_E	A2-12
11	tPLZ_E	A2-13
12	VCL_E!	A2-14
13	Vil_E!	A2-15
14	Vih_E!	A2-16
15	Iih_E!	A2-17
16	Iil_E!	A2-18
17	tPZL_E!	A2-19
18	tPZH_E!	A2-20
19	tPHZ_E!	A2-21
20	tPLZ_E!	A2-22
21	Ios, Module 1	A2-23
22	Ios, Module 2	A2-24
23	Ios, Module 3	A2-25
24	Ios, Module 4	A2-26
25	Vth, Module 1	A2-27
26	Vth, Module 2	A2-28
27	Vth, Module 3	A2-29
28	Vth, Module 4	A2-30
29	Vtl, Module 1	A2-31
30	Vtl, Module 2	A2-32
31	Vtl, Module 3	A2-33
32	Vtl, Module 4	A2-34
33	Iip, Module 1	A2-35
34	Iip, Module 2	A2-36
35	Iip, Module 3	A2-37



**TOTAL IRRADIATION DOSE
TEST REPORT**

RHRLVDS32 (DC0804A)

Ref: TRAD/TE/RHRLVDS32/0804/STM/LP/0804

Date: May 22nd, 2008

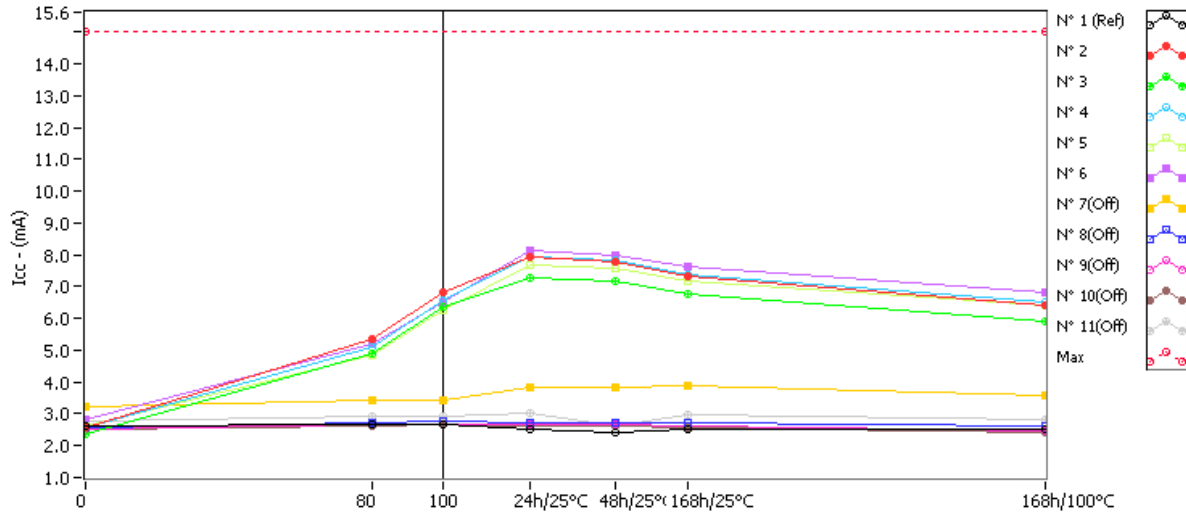
Rev: 0

Contents :

36 Iip, Module 4	.....	A2-38
37 Iin, Module 1	.....	A2-39
38 Iin, Module 2	.....	A2-40
39 Iin, Module 3	.....	A2-41
40 Iin, Module 4	.....	A2-42
41 Voh, Module 1	.....	A2-43
42 Voh, Module 2	.....	A2-44
43 Voh, Module 3	.....	A2-45
44 Voh, Module 4	.....	A2-46
45 Vol, Module 1	.....	A2-47
46 Vol, Module 2	.....	A2-48
47 Vol, Module 3	.....	A2-49
48 Vol, Module 4	.....	A2-50
49 Ioz_0V, Module 1	.....	A2-51
50 Ioz_0V, Module 2	.....	A2-52
51 Ioz_0V, Module 3	.....	A2-53
52 Ioz_0V, Module 4	.....	A2-54
53 Ioz_3.6V, Module 1	.....	A2-55
54 Ioz_3.6V, Module 2	.....	A2-56
55 Ioz_3.6V, Module 3	.....	A2-57
56 Ioz_3.6V, Module 4	.....	A2-58
57 tPLHD, Module 1	.....	A2-59
58 tPLHD, Module 2	.....	A2-60
59 tPLHD, Module 3	.....	A2-61
60 tPLHD, Module 4	.....	A2-62
61 tPHLD, Module 1	.....	A2-63
62 tPHLD, Module 2	.....	A2-64
63 tPHLD, Module 3	.....	A2-65
64 tPHLD, Module 4	.....	A2-66
65 tSKD, Module 1	.....	A2-67
66 tSKD, Module 2	.....	A2-68
67 tSKD, Module 3	.....	A2-69
68 tSKD, Module 4	.....	A2-70

1. Icc

"EN = EN! = GND or VCC ; inputs open"



Icc . (mA)

Max = 15.0

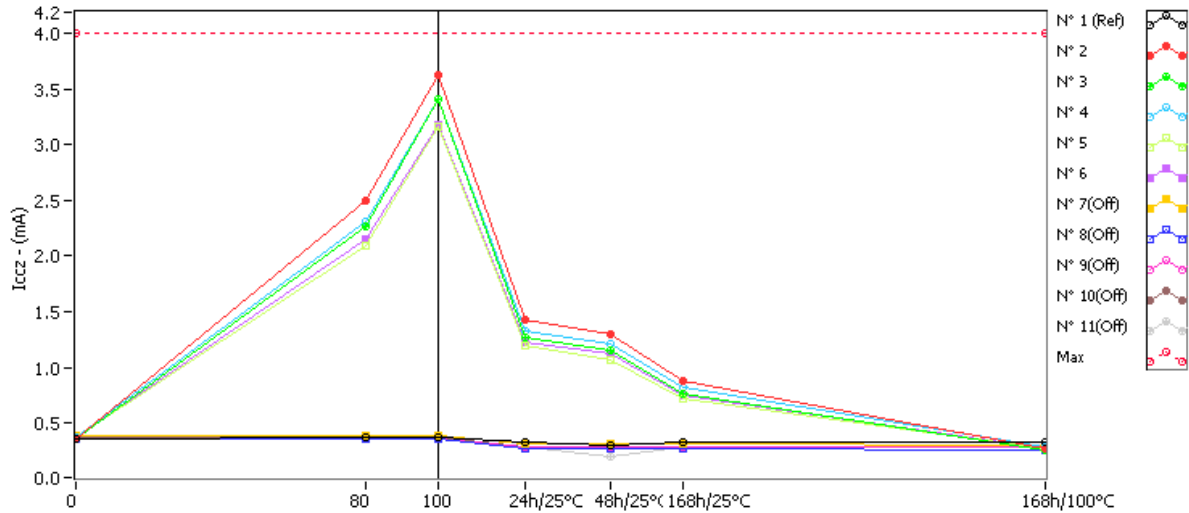
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	2.630	2.667	2.664	2.527	2.418	2.532	2.518
N° 2	2.556	5.346	6.811	7.916	7.765	7.345	6.399
N° 3	2.375	4.883	6.346	7.295	7.169	6.764	5.918
N° 4	2.554	5.097	6.546	7.947	7.814	7.404	6.538
N° 5	2.615	4.868	6.246	7.693	7.566	7.199	6.416
N° 6	2.817	5.201	6.543	8.132	8.004	7.650	6.811
N° 7(Off)	3.219	3.436	3.454	3.857	3.845	3.873	3.599
N° 8(Off)	2.593	2.739	2.747	2.720	2.718	2.728	2.615
N° 9(Off)	2.530	2.666	2.686	2.656	2.648	2.634	2.466
N° 10(Off)	2.505	2.640	2.653	2.602	2.600	2.555	2.434
N° 11(Off)	2.755	2.932	2.942	3.012	2.603	2.990	2.815

Delta [Icc]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	3.700E-2	3.400E-2	-1.030E-1	-2.120E-1	-9.800E-2	-1.120E-1
N° 2	---	2.790E+0	4.255E+0	5.360E+0	5.209E+0	4.789E+0	3.843E+0
N° 3	---	2.508E+0	3.971E+0	4.920E+0	4.794E+0	4.389E+0	3.543E+0
N° 4	---	2.543E+0	3.992E+0	5.393E+0	5.260E+0	4.850E+0	3.984E+0
N° 5	---	2.253E+0	3.631E+0	5.078E+0	4.951E+0	4.584E+0	3.801E+0
N° 6	---	2.384E+0	3.726E+0	5.315E+0	5.187E+0	4.833E+0	3.994E+0
N° 7(Off)	---	2.170E-1	2.350E-1	6.380E-1	6.260E-1	6.540E-1	3.800E-1
N° 8(Off)	---	1.460E-1	1.540E-1	1.270E-1	1.250E-1	1.350E-1	2.200E-2
N° 9(Off)	---	1.360E-1	1.560E-1	1.260E-1	1.180E-1	1.040E-1	-6.400E-2
N° 10(Off)	---	1.350E-1	1.480E-1	9.700E-2	9.500E-2	5.000E-2	-7.100E-2
N° 11(Off)	---	1.770E-1	1.870E-1	2.570E-1	-1.520E-1	2.350E-1	6.000E-2
Average	---	2.496E+0	3.915E+0	5.213E+0	5.080E+0	4.689E+0	3.833E+0
s	---	2.002E-1	2.455E-1	2.052E-1	1.993E-1	1.985E-1	1.830E-1
Average+3s	---	3.096E+0	4.651E+0	5.829E+0	5.678E+0	5.285E+0	4.382E+0
Average-3s	---	1.895E+0	3.179E+0	4.597E+0	4.482E+0	4.093E+0	3.284E+0

2. Iccz

"EN = GND ; EN! = Vcc ; inputs open"



Iccz . (mA)

Max = 4.0

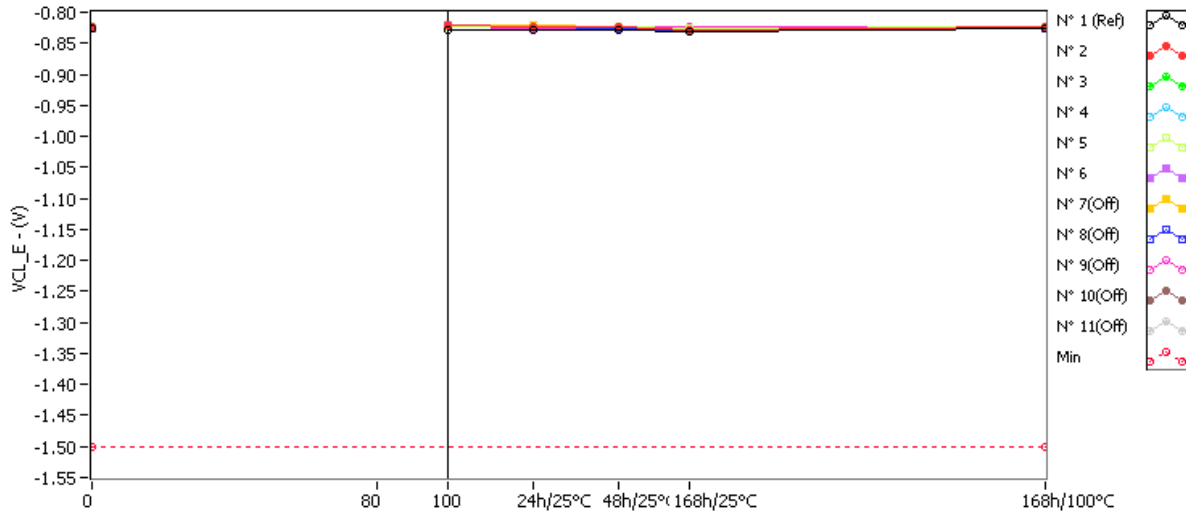
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.364	0.366	0.366	0.323	0.293	0.324	0.321
N° 2	0.364	2.491	3.633	1.422	1.292	0.876	0.277
N° 3	0.360	2.272	3.407	1.266	1.146	0.765	0.260
N° 4	0.371	2.309	3.410	1.333	1.208	0.821	0.286
N° 5	0.367	2.098	3.163	1.189	1.073	0.715	0.269
N° 6	0.370	2.153	3.174	1.232	1.118	0.753	0.277
N° 7(Off)	0.383	0.389	0.390	0.309	0.308	0.309	0.298
N° 8(Off)	0.353	0.360	0.360	0.272	0.271	0.273	0.263
N° 9(Off)	0.355	0.361	0.361	0.289	0.288	0.288	0.281
N° 10(Off)	0.366	0.372	0.373	0.289	0.288	0.287	0.281
N° 11(Off)	0.359	0.366	0.366	0.288	0.200	0.287	0.280

Delta [Iccz]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	2.000E-3	2.000E-3	-4.100E-2	-7.100E-2	-4.000E-2	-4.300E-2
N° 2	---	2.127E+0	3.269E+0	1.058E+0	9.280E-1	5.120E-1	-8.700E-2
N° 3	---	1.912E+0	3.047E+0	9.060E-1	7.860E-1	4.050E-1	-1.000E-1
N° 4	---	1.938E+0	3.039E+0	9.620E-1	8.370E-1	4.500E-1	-8.500E-2
N° 5	---	1.731E+0	2.796E+0	8.220E-1	7.060E-1	3.480E-1	-9.800E-2
N° 6	---	1.783E+0	2.804E+0	8.620E-1	7.480E-1	3.830E-1	-9.300E-2
N° 7(Off)	---	6.000E-3	7.000E-3	-7.400E-2	-7.500E-2	-7.400E-2	-8.500E-2
N° 8(Off)	---	7.000E-3	7.000E-3	-8.100E-2	-8.200E-2	-8.000E-2	-9.000E-2
N° 9(Off)	---	6.000E-3	6.000E-3	-6.600E-2	-6.700E-2	-6.700E-2	-7.400E-2
N° 10(Off)	---	6.000E-3	7.000E-3	-7.700E-2	-7.800E-2	-7.900E-2	-8.500E-2
N° 11(Off)	---	7.000E-3	7.000E-3	-7.100E-2	-1.590E-1	-7.200E-2	-7.900E-2
Average	---	1.898E+0	2.991E+0	9.220E-1	8.010E-1	4.196E-1	-9.260E-2
s	---	1.544E-1	1.973E-1	9.213E-2	8.585E-2	6.352E-2	6.580E-3
Average+3s	---	2.361E+0	3.583E+0	1.198E+0	1.059E+0	6.102E-1	-7.286E-2
Average-3s	---	1.435E+0	2.399E+0	6.456E-1	5.434E-1	2.290E-1	-1.123E-1

3. VCL_E

"Icl = 18mA"



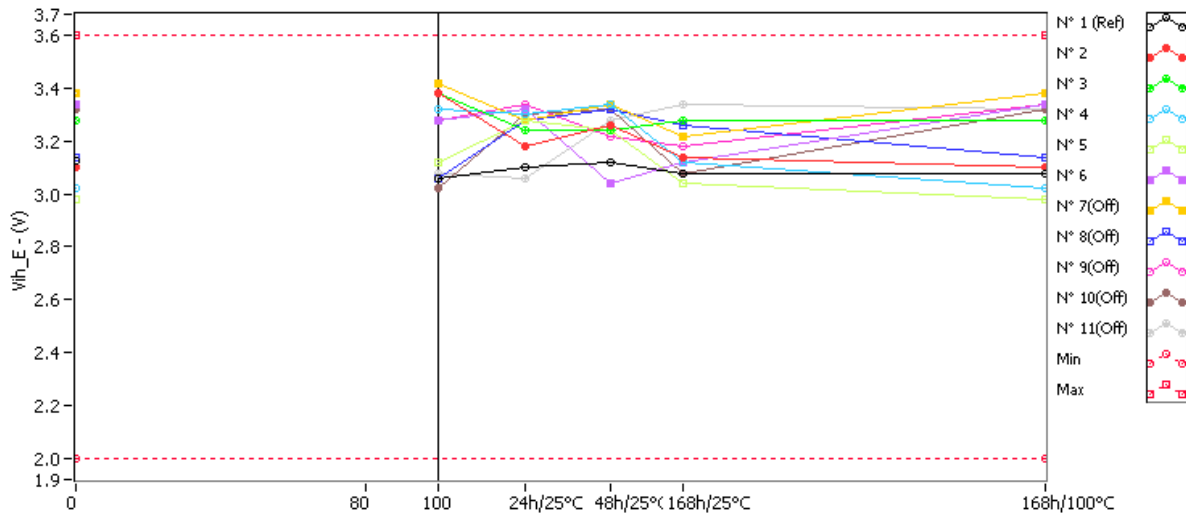
VCL_E . (V) Min = -1.5

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-0.826	NaN	-0.829	-0.828	-0.829	-0.832	-0.826
N° 2	-0.823	NaN	-0.820	-0.823	-0.824	-0.828	-0.823
N° 3	-0.823	NaN	-0.821	-0.823	-0.824	-0.828	-0.823
N° 4	-0.823	NaN	-0.821	-0.823	-0.824	-0.828	-0.823
N° 5	-0.823	NaN	-0.823	-0.824	-0.824	-0.827	-0.823
N° 6	-0.823	NaN	-0.822	-0.823	-0.823	-0.827	-0.823
N° 7(Off)	-0.823	NaN	-0.822	-0.822	-0.823	-0.826	-0.823
N° 8(Off)	-0.826	NaN	-0.823	-0.824	-0.825	-0.828	-0.826
N° 9(Off)	-0.826	NaN	-0.823	-0.825	-0.825	-0.824	-0.826
N° 10(Off)	-0.826	NaN	-0.823	-0.823	-0.824	-0.823	-0.826
N° 11(Off)	-0.826	NaN	-0.822	-0.824	-0.824	-0.824	-0.826

Delta [VCL_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-3.000E-3	-2.000E-3	-3.000E-3	-6.000E-3	0.000E+0
N° 2	---	NaN	3.000E-3	0.000E+0	-1.000E-3	-5.000E-3	0.000E+0
N° 3	---	NaN	2.000E-3	0.000E+0	-1.000E-3	-5.000E-3	0.000E+0
N° 4	---	NaN	2.000E-3	0.000E+0	-1.000E-3	-5.000E-3	0.000E+0
N° 5	---	NaN	0.000E+0	-1.000E-3	-1.000E-3	-4.000E-3	0.000E+0
N° 6	---	NaN	1.000E-3	0.000E+0	0.000E+0	-4.000E-3	0.000E+0
N° 7(Off)	---	NaN	1.000E-3	1.000E-3	0.000E+0	-3.000E-3	0.000E+0
N° 8(Off)	---	NaN	3.000E-3	2.000E-3	1.000E-3	-2.000E-3	0.000E+0
N° 9(Off)	---	NaN	3.000E-3	1.000E-3	1.000E-3	2.000E-3	0.000E+0
N° 10(Off)	---	NaN	3.000E-3	3.000E-3	2.000E-3	3.000E-3	0.000E+0
N° 11(Off)	---	NaN	4.000E-3	2.000E-3	2.000E-3	2.000E-3	0.000E+0
Average	---	NaN	1.600E-3	-2.000E-4	-8.000E-4	-4.600E-3	0.000E+0
s	---	0.000E+0	1.140E-3	4.472E-4	4.472E-4	5.477E-4	0.000E+0
Average+3s	---	NaN	5.021E-3	1.142E-3	5.416E-4	-2.957E-3	0.000E+0
Average-3s	---	NaN	-1.821E-3	-1.542E-3	-2.142E-3	-6.243E-3	0.000E+0

4. Vih_E



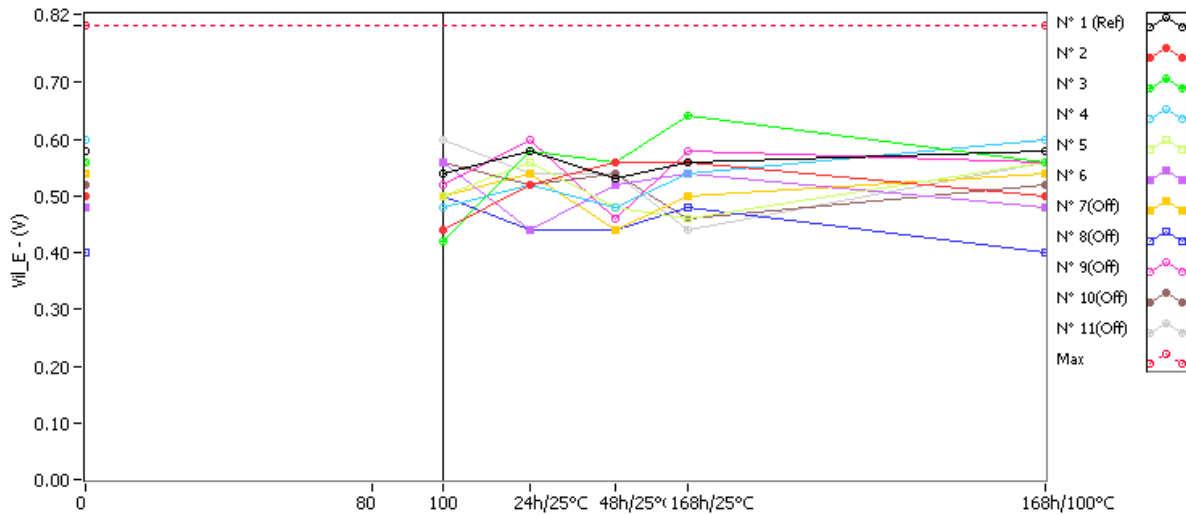
Vih_E . (V) Min = 2.0 Max = 3.6

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.128	NaN	3.060	3.100	3.120	3.080	3.080
N° 2	3.100	NaN	3.380	3.180	3.260	3.140	3.100
N° 3	3.280	NaN	3.380	3.240	3.240	3.280	3.280
N° 4	3.020	NaN	3.320	3.300	3.340	3.120	3.020
N° 5	2.980	NaN	3.120	3.280	3.240	3.040	2.980
N° 6	3.340	NaN	3.280	3.320	3.040	3.120	3.340
N° 7(Off)	3.380	NaN	3.420	3.280	3.340	3.220	3.380
N° 8(Off)	3.140	NaN	3.060	3.280	3.320	3.260	3.140
N° 9(Off)	3.340	NaN	3.280	3.340	3.220	3.180	3.340
N° 10(Off)	3.320	NaN	3.020	3.300	3.320	3.080	3.320
N° 11(Off)	3.320	NaN	3.080	3.060	3.280	3.340	3.320

Delta [Vih_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-6.800E-2	-2.800E-2	-8.000E-3	-4.800E-2	-4.800E-2
N° 2	---	NaN	2.800E-1	8.000E-2	1.600E-1	4.000E-2	0.000E+0
N° 3	---	NaN	1.000E-1	-4.000E-2	-4.000E-2	0.000E+0	0.000E+0
N° 4	---	NaN	3.000E-1	2.800E-1	3.200E-1	1.000E-1	0.000E+0
N° 5	---	NaN	1.400E-1	3.000E-1	2.600E-1	6.000E-2	0.000E+0
N° 6	---	NaN	-6.000E-2	-2.000E-2	-3.000E-1	-2.200E-1	0.000E+0
N° 7(Off)	---	NaN	4.000E-2	-1.000E-1	-4.000E-2	-1.600E-1	0.000E+0
N° 8(Off)	---	NaN	-8.000E-2	1.400E-1	1.800E-1	1.200E-1	0.000E+0
N° 9(Off)	---	NaN	-6.000E-2	0.000E+0	-1.200E-1	-1.600E-1	0.000E+0
N° 10(Off)	---	NaN	-3.000E-1	-2.000E-2	0.000E+0	-2.400E-1	0.000E+0
N° 11(Off)	---	NaN	-2.400E-1	-2.600E-1	-4.000E-2	2.000E-2	0.000E+0
Average	---	NaN	1.520E-1	1.200E-1	8.000E-2	-4.000E-3	0.000E+0
s	---	0.000E+0	1.467E-1	1.619E-1	2.526E-1	1.260E-1	0.000E+0
Average+3s	---	NaN	5.921E-1	6.056E-1	8.378E-1	3.740E-1	0.000E+0
Average-3s	---	NaN	-2.881E-1	-3.656E-1	-6.778E-1	-3.820E-1	0.000E+0

5. Vil_E



Vil_E . (V) Max = 0.8

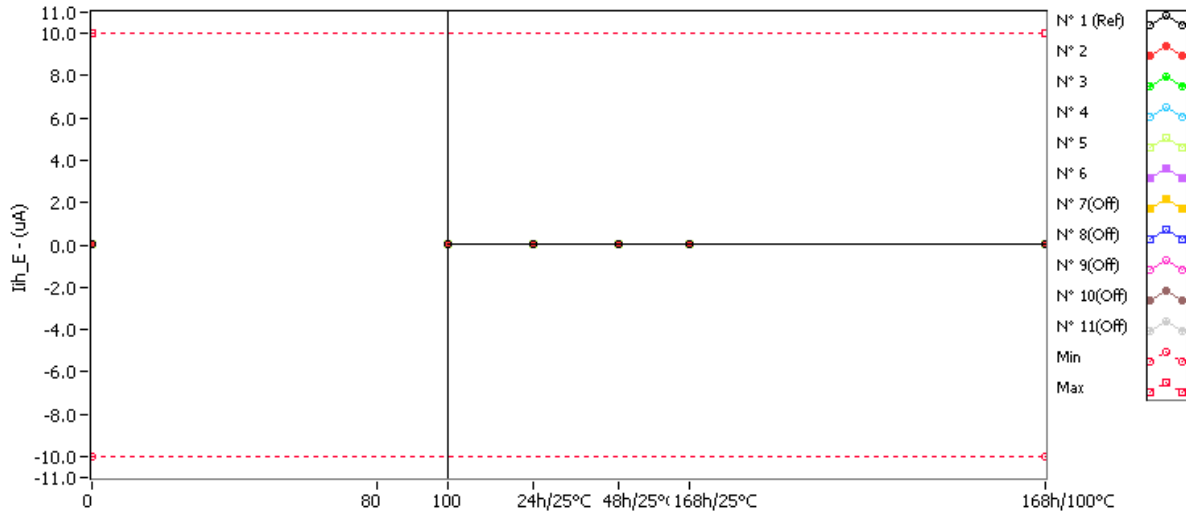
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.580	NaN	0.540	0.580	0.530	0.560	0.580
N° 2	0.500	NaN	0.440	0.520	0.560	0.560	0.500
N° 3	0.560	NaN	0.420	0.580	0.560	0.640	0.560
N° 4	0.600	NaN	0.480	0.520	0.480	0.540	0.600
N° 5	0.560	NaN	0.500	0.560	0.480	0.460	0.560
N° 6	0.480	NaN	0.560	0.440	0.520	0.540	0.480
N° 7(Off)	0.540	NaN	0.500	0.540	0.440	0.500	0.540
N° 8(Off)	0.400	NaN	0.500	0.440	0.440	0.480	0.400
N° 9(Off)	0.560	NaN	0.520	0.600	0.460	0.580	0.560
N° 10(Off)	0.520	NaN	0.560	0.520	0.540	0.460	0.520
N° 11(Off)	0.560	NaN	0.600	0.540	0.540	0.440	0.560

Delta [Vil_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-4.000E-2	0.000E+0	-5.000E-2	-2.000E-2	0.000E+0
N° 2	---	NaN	-6.000E-2	2.000E-2	6.000E-2	6.000E-2	0.000E+0
N° 3	---	NaN	-1.400E-1	2.000E-2	0.000E+0	8.000E-2	0.000E+0
N° 4	---	NaN	-1.200E-1	-8.000E-2	-1.200E-1	-6.000E-2	0.000E+0
N° 5	---	NaN	-6.000E-2	0.000E+0	-8.000E-2	-1.000E-1	0.000E+0
N° 6	---	NaN	8.000E-2	-4.000E-2	4.000E-2	6.000E-2	0.000E+0
N° 7(Off)	---	NaN	-4.000E-2	0.000E+0	-1.000E-1	-4.000E-2	0.000E+0
N° 8(Off)	---	NaN	1.000E-1	4.000E-2	4.000E-2	8.000E-2	0.000E+0
N° 9(Off)	---	NaN	-4.000E-2	4.000E-2	-1.000E-1	2.000E-2	0.000E+0
N° 10(Off)	---	NaN	4.000E-2	0.000E+0	2.000E-2	-6.000E-2	0.000E+0
N° 11(Off)	---	NaN	4.000E-2	-2.000E-2	-2.000E-2	-1.200E-1	0.000E+0
Average	---	NaN	-6.000E-2	-1.600E-2	-2.000E-2	8.000E-3	0.000E+0
s	---	0.000E+0	8.602E-2	4.336E-2	7.746E-2	8.198E-2	0.000E+0
Average+3s	---	NaN	1.981E-1	1.141E-1	2.124E-1	2.539E-1	0.000E+0
Average-3s	---	NaN	-3.181E-1	-1.461E-1	-2.524E-1	-2.379E-1	0.000E+0

6. Iih_E

"Vin = 3.6V ; Vcc = 3.6V ; Enable pins"



Iih_E . (uA) Min = -10.0 Max = 10.0

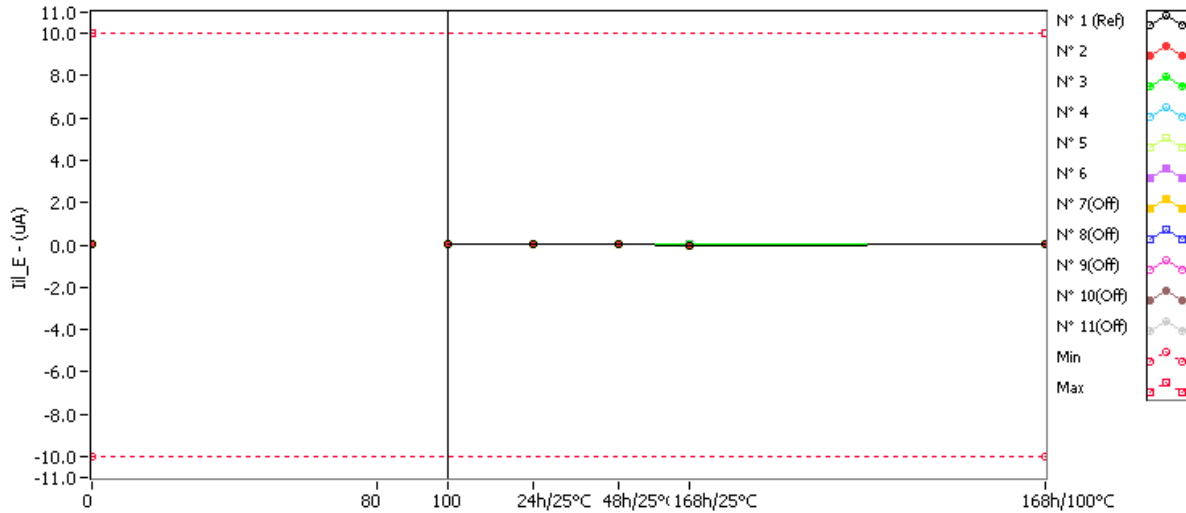
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000041	NaN	0.000029	0.000032	0.000032	0.000033	0.000041
N° 2	0.000041	NaN	0.000040	0.000037	0.000036	0.000038	0.000041
N° 3	0.000070	NaN	0.000064	0.000060	0.000061	0.000059	0.000070
N° 4	0.000066	NaN	0.000059	0.000061	0.000058	0.000058	0.000066
N° 5	0.000042	NaN	0.000035	0.000035	0.000037	0.000041	0.000042
N° 6	0.000057	NaN	0.000050	0.000050	0.000051	0.000054	0.000057
N° 7(Off)	0.000055	NaN	0.000048	0.000052	0.000049	0.000051	0.000055
N° 8(Off)	0.000040	NaN	0.000038	0.000040	0.000038	0.000042	0.000040
N° 9(Off)	0.000044	NaN	0.000044	0.000041	0.000041	0.000048	0.000044
N° 10(Off)	0.000049	NaN	0.000050	0.000053	0.000050	0.000057	0.000049
N° 11(Off)	0.000040	NaN	0.000040	0.000040	0.000038	0.000043	0.000040

Delta [Iih_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.200E-5	-9.000E-6	-9.000E-6	-8.000E-6	0.000E+0
N° 2	---	NaN	-1.000E-6	-4.000E-6	-5.000E-6	-3.000E-6	0.000E+0
N° 3	---	NaN	-6.000E-6	-1.000E-5	-9.000E-6	-1.100E-5	0.000E+0
N° 4	---	NaN	-7.000E-6	-5.000E-6	-8.000E-6	-8.000E-6	0.000E+0
N° 5	---	NaN	-7.000E-6	-7.000E-6	-5.000E-6	-1.000E-6	0.000E+0
N° 6	---	NaN	-7.000E-6	-7.000E-6	-6.000E-6	-3.000E-6	0.000E+0
N° 7(Off)	---	NaN	-7.000E-6	-3.000E-6	-6.000E-6	-4.000E-6	0.000E+0
N° 8(Off)	---	NaN	-2.000E-6	0.000E+0	-2.000E-6	2.000E-6	0.000E+0
N° 9(Off)	---	NaN	0.000E+0	-3.000E-6	-3.000E-6	4.000E-6	0.000E+0
N° 10(Off)	---	NaN	1.000E-6	4.000E-6	1.000E-6	8.000E-6	0.000E+0
N° 11(Off)	---	NaN	0.000E+0	0.000E+0	-2.000E-6	3.000E-6	0.000E+0
Average	---	NaN	-5.600E-6	-6.600E-6	-6.600E-6	-5.200E-6	0.000E+0
s	---	0.000E+0	2.608E-6	2.302E-6	1.817E-6	4.147E-6	0.000E+0
Average+3s	---	NaN	2.223E-6	3.065E-7	-1.150E-6	7.242E-6	0.000E+0
Average-3s	---	NaN	-1.342E-5	-1.351E-5	-1.205E-5	-1.764E-5	0.000E+0

7. Iil_E

"Vin = 3.6V ; Vcc = 3.6V ; Enable pins"



Iil_E . (uA) Min = -10.0 Max = 10.0

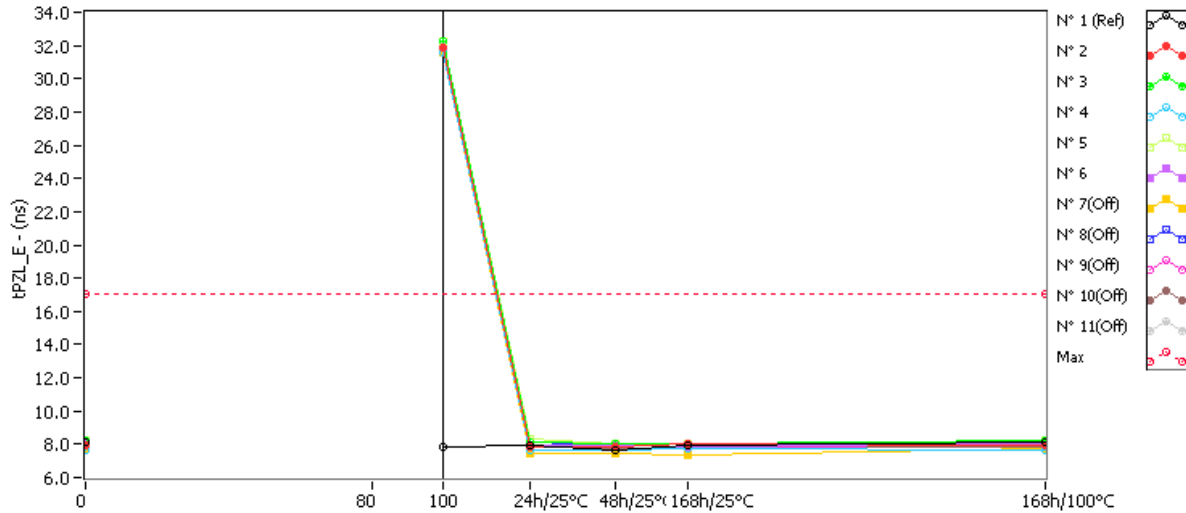
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000009	NaN	0.000004	0.000007	0.000007	0.000000	0.000009
N° 2	0.000013	NaN	0.000010	0.000010	0.000009	-0.000001	0.000013
N° 3	0.000032	NaN	0.000028	0.000026	0.000026	0.000011	0.000032
N° 4	0.000026	NaN	0.000022	0.000023	0.000022	0.000004	0.000026
N° 5	0.000015	NaN	0.000011	0.000011	0.000012	0.000000	0.000015
N° 6	0.000022	NaN	0.000017	0.000018	0.000018	0.000003	0.000022
N° 7(Off)	0.000021	NaN	0.000016	0.000019	0.000017	0.000003	0.000021
N° 8(Off)	0.000014	NaN	0.000012	0.000014	0.000012	0.000002	0.000014
N° 9(Off)	0.000016	NaN	0.000014	0.000014	0.000014	0.000008	0.000016
N° 10(Off)	0.000016	NaN	0.000015	0.000019	0.000017	0.000014	0.000016
N° 11(Off)	0.000011	NaN	0.000010	0.000011	0.000011	0.000008	0.000011

Delta [Iil_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-5.000E-6	-2.000E-6	-2.000E-6	-9.000E-6	0.000E+0
N° 2	---	NaN	-3.000E-6	-3.000E-6	-4.000E-6	-1.400E-5	0.000E+0
N° 3	---	NaN	-4.000E-6	-6.000E-6	-6.000E-6	-2.100E-5	0.000E+0
N° 4	---	NaN	-4.000E-6	-3.000E-6	-4.000E-6	-2.200E-5	0.000E+0
N° 5	---	NaN	-4.000E-6	-4.000E-6	-3.000E-6	-1.500E-5	0.000E+0
N° 6	---	NaN	-5.000E-6	-4.000E-6	-4.000E-6	-1.900E-5	0.000E+0
N° 7(Off)	---	NaN	-5.000E-6	-2.000E-6	-4.000E-6	-1.800E-5	0.000E+0
N° 8(Off)	---	NaN	-2.000E-6	0.000E+0	-2.000E-6	-1.200E-5	0.000E+0
N° 9(Off)	---	NaN	-2.000E-6	-2.000E-6	-2.000E-6	-8.000E-6	0.000E+0
N° 10(Off)	---	NaN	-1.000E-6	3.000E-6	1.000E-6	-2.000E-6	0.000E+0
N° 11(Off)	---	NaN	-1.000E-6	0.000E+0	0.000E+0	-3.000E-6	0.000E+0
Average	---	NaN	-4.000E-6	-4.000E-6	-4.200E-6	-1.820E-5	0.000E+0
s	---	0.000E+0	7.071E-7	1.225E-6	1.095E-6	3.564E-6	0.000E+0
Average+3s	---	NaN	-1.879E-6	-3.258E-7	-9.137E-7	-7.509E-6	0.000E+0
Average-3s	---	NaN	-6.121E-6	-7.674E-6	-7.486E-6	-2.889E-5	0.000E+0

8. tPZL_E

"Input pulse = 0V to 3V ; Vin = 1.5V ; Vout = 50% ; RL = 1k"



tPZL_E . (ns) Max = 17.0

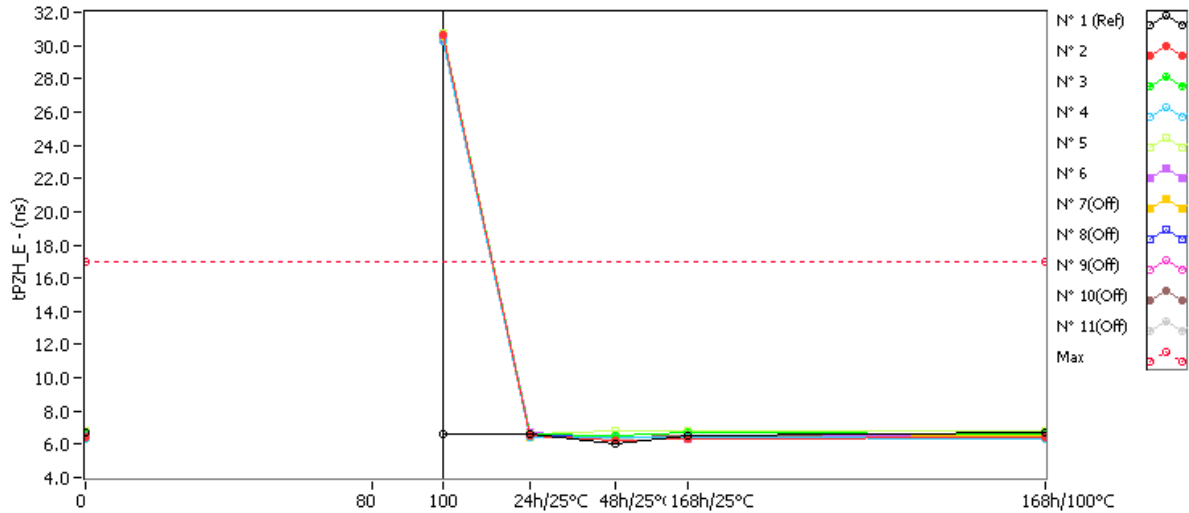
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	8.100	NaN	7.800	7.900	7.600	7.900	8.100
N° 2	7.900	NaN	31.900	7.800	7.800	8.000	7.900
N° 3	8.200	NaN	32.300	8.100	8.000	8.000	8.200
N° 4	7.600	NaN	31.600	7.600	7.600	7.700	7.600
N° 5	8.200	NaN	32.300	8.300	8.000	8.000	8.200
N° 6	8.000	NaN	31.900	7.900	7.900	7.800	8.000
N° 7(Off)	7.700	NaN	31.600	7.500	7.500	7.400	7.700
N° 8(Off)	8.200	NaN	32.100	8.100	7.900	8.000	8.200
N° 9(Off)	8.000	NaN	31.800	7.600	7.600	7.700	8.000
N° 10(Off)	7.800	NaN	31.900	7.800	7.700	7.700	7.800
N° 11(Off)	7.900	NaN	32.000	7.800	7.700	7.700	7.900

Delta [tPZL_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-3.000E-1	-2.000E-1	-5.000E-1	-2.000E-1	0.000E+0
N° 2	---	NaN	2.400E+1	-1.000E-1	-1.000E-1	1.000E-1	0.000E+0
N° 3	---	NaN	2.410E+1	-1.000E-1	-2.000E-1	-2.000E-1	0.000E+0
N° 4	---	NaN	2.400E+1	0.000E+0	0.000E+0	1.000E-1	0.000E+0
N° 5	---	NaN	2.410E+1	1.000E-1	-2.000E-1	-2.000E-1	0.000E+0
N° 6	---	NaN	2.390E+1	-1.000E-1	-1.000E-1	-2.000E-1	0.000E+0
N° 7(Off)	---	NaN	2.390E+1	-2.000E-1	-2.000E-1	-3.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.390E+1	-1.000E-1	-3.000E-1	-2.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.380E+1	-4.000E-1	-4.000E-1	-3.000E-1	0.000E+0
N° 10(Off)	---	NaN	2.410E+1	0.000E+0	-1.000E-1	-1.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.410E+1	-1.000E-1	-2.000E-1	-2.000E-1	0.000E+0
Average	---	NaN	2.402E+1	-4.000E-2	-1.200E-1	-8.000E-2	0.000E+0
s	---	0.000E+0	8.367E-2	8.944E-2	8.367E-2	1.643E-1	0.000E+0
Average+3s	---	NaN	2.427E+1	2.283E-1	1.310E-1	4.130E-1	0.000E+0
Average-3s	---	NaN	2.377E+1	-3.083E-1	-3.710E-1	-5.730E-1	0.000E+0

9. tPZH_E

"Input pulse = 0V to 3V ; Vin = 1.5V ; Vout = 50% ; RL = 1k"



tPZH_E . (ns) Max = 17.0

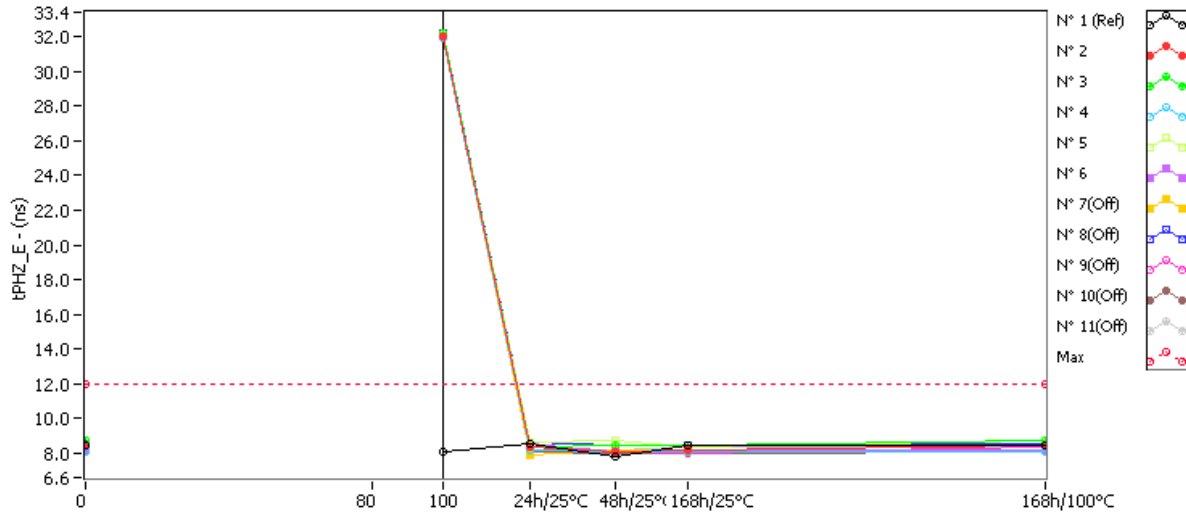
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	6.700	NaN	6.600	6.600	6.050	6.500	6.700
N° 2	6.400	NaN	30.600	6.500	6.200	6.300	6.400
N° 3	6.600	NaN	30.600	6.600	6.500	6.700	6.600
N° 4	6.300	NaN	30.300	6.400	6.400	6.400	6.300
N° 5	6.800	NaN	30.700	6.600	6.800	6.800	6.800
N° 6	6.700	NaN	30.600	6.700	6.400	6.300	6.700
N° 7(Off)	6.500	NaN	30.500	6.400	6.400	6.400	6.500
N° 8(Off)	6.600	NaN	30.700	6.500	6.500	6.700	6.600
N° 9(Off)	6.400	NaN	30.400	6.400	6.400	6.400	6.400
N° 10(Off)	6.400	NaN	30.400	6.400	6.400	6.500	6.400
N° 11(Off)	6.600	NaN	30.500	6.500	6.300	6.500	6.600

Delta [tPZH_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.000E-1	-1.000E-1	-6.500E-1	-2.000E-1	0.000E+0
N° 2	---	NaN	2.420E+1	1.000E-1	-2.000E-1	-1.000E-1	0.000E+0
N° 3	---	NaN	2.400E+1	0.000E+0	-1.000E-1	1.000E-1	0.000E+0
N° 4	---	NaN	2.400E+1	1.000E-1	1.000E-1	1.000E-1	0.000E+0
N° 5	---	NaN	2.390E+1	-2.000E-1	0.000E+0	0.000E+0	0.000E+0
N° 6	---	NaN	2.390E+1	0.000E+0	-3.000E-1	-4.000E-1	0.000E+0
N° 7(Off)	---	NaN	2.400E+1	-1.000E-1	-1.000E-1	-1.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.410E+1	-1.000E-1	-1.000E-1	1.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.400E+1	0.000E+0	0.000E+0	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	2.400E+1	0.000E+0	0.000E+0	1.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.390E+1	-1.000E-1	-3.000E-1	-1.000E-1	0.000E+0
Average	---	NaN	2.400E+1	0.000E+0	-1.000E-1	-6.000E-2	0.000E+0
s	---	0.000E+0	1.225E-1	1.225E-1	1.581E-1	2.074E-1	0.000E+0
Average+3s	---	NaN	2.437E+1	3.674E-1	3.743E-1	5.621E-1	0.000E+0
Average-3s	---	NaN	2.363E+1	-3.674E-1	-5.743E-1	-6.821E-1	0.000E+0

10. tPHZ_E

"Input pulse = 0V to 3V ; Vin = 1.5V ; RL = 1k ; Vout = Voh-0.5V"



tPHZ_E . (ns)

Max = 12.0

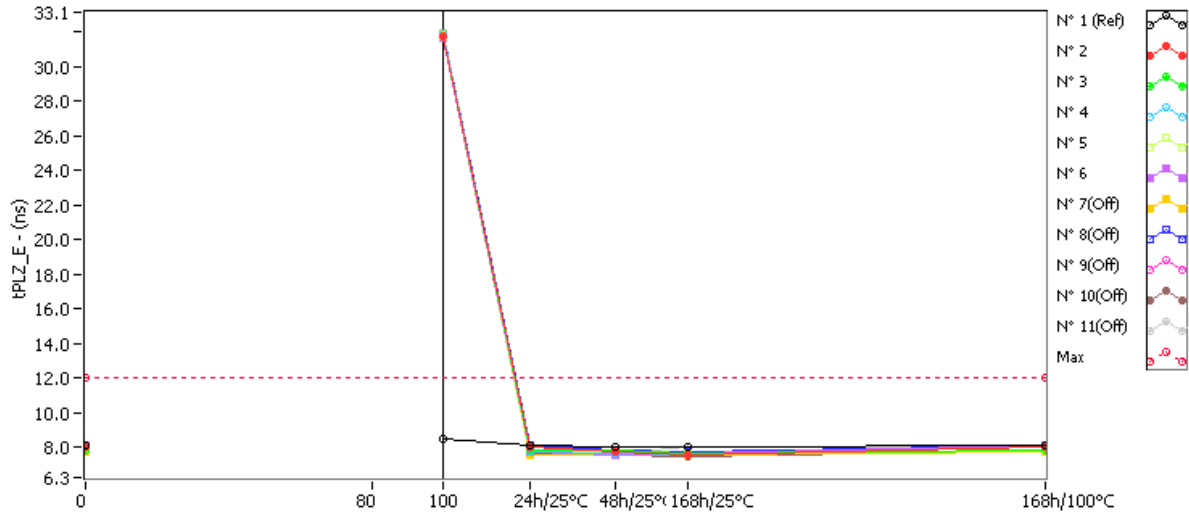
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	8.400	NaN	8.100	8.500	7.800	8.400	8.400
N° 2	8.400	NaN	32.000	8.300	8.100	8.200	8.400
N° 3	8.700	NaN	32.200	8.300	8.400	8.400	8.700
N° 4	8.100	NaN	31.900	8.200	8.100	8.100	8.100
N° 5	8.700	NaN	32.100	8.600	8.700	8.300	8.700
N° 6	8.200	NaN	32.000	8.500	8.100	8.200	8.200
N° 7(Off)	8.200	NaN	32.000	7.900	8.200	8.100	8.200
N° 8(Off)	8.500	NaN	32.200	8.600	8.400	8.400	8.500
N° 9(Off)	8.300	NaN	32.000	8.300	8.100	8.000	8.300
N° 10(Off)	8.100	NaN	31.900	8.100	8.000	8.000	8.100
N° 11(Off)	8.300	NaN	32.000	8.100	8.200	8.300	8.300

Delta [tPHZ_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-3.000E-1	1.000E-1	-6.000E-1	0.000E+0	0.000E+0
N° 2	---	NaN	2.360E+1	-1.000E-1	-3.000E-1	-2.000E-1	0.000E+0
N° 3	---	NaN	2.350E+1	-4.000E-1	-3.000E-1	-3.000E-1	0.000E+0
N° 4	---	NaN	2.380E+1	1.000E-1	0.000E+0	0.000E+0	0.000E+0
N° 5	---	NaN	2.340E+1	-1.000E-1	0.000E+0	-4.000E-1	0.000E+0
N° 6	---	NaN	2.380E+1	3.000E-1	-1.000E-1	0.000E+0	0.000E+0
N° 7(Off)	---	NaN	2.380E+1	-3.000E-1	0.000E+0	-1.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.370E+1	1.000E-1	-1.000E-1	-1.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.370E+1	0.000E+0	-2.000E-1	-3.000E-1	0.000E+0
N° 10(Off)	---	NaN	2.380E+1	0.000E+0	-1.000E-1	-1.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.370E+1	-2.000E-1	-1.000E-1	0.000E+0	0.000E+0
Average	---	NaN	2.362E+1	-4.000E-2	-1.400E-1	-1.800E-1	0.000E+0
s	---	0.000E+0	1.789E-1	2.608E-1	1.517E-1	1.789E-1	0.000E+0
Average+3s	---	NaN	2.416E+1	7.423E-1	3.150E-1	3.567E-1	0.000E+0
Average-3s	---	NaN	2.308E+1	-8.223E-1	-5.950E-1	-7.167E-1	0.000E+0

11. tPLZ_E

"Input pulse = 0V to 3V ; Vin = 1.5V ; RL = 1k ; Vout = Vol+0.5V"



tPLZ_E . (ns) Max = 12.0

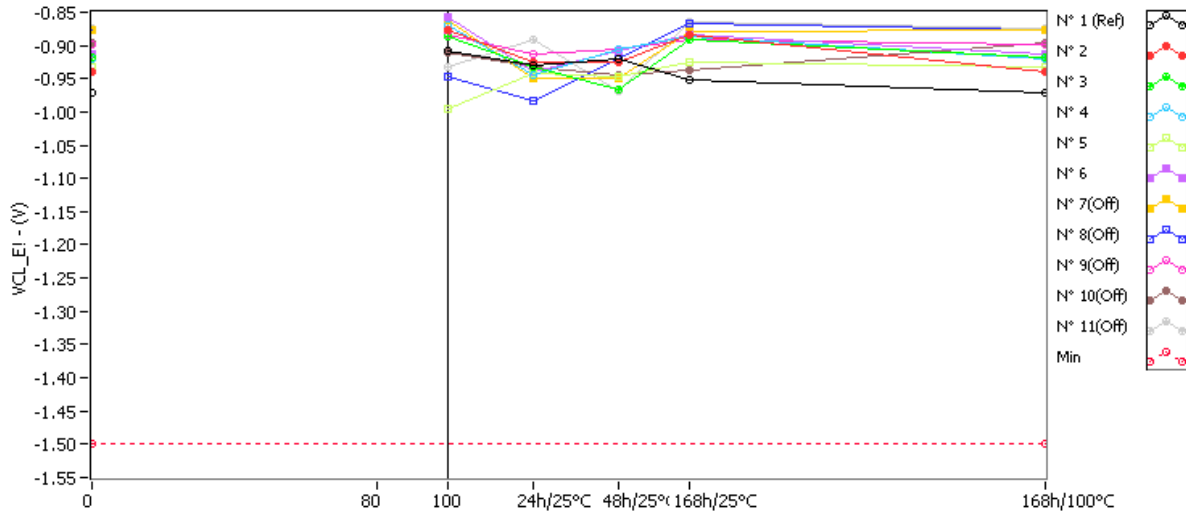
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	8.100	NaN	8.500	8.100	8.000	8.000	8.100
N° 2	8.000	NaN	31.700	8.000	7.800	7.600	8.000
N° 3	7.900	NaN	31.700	7.900	7.900	7.700	7.900
N° 4	8.000	NaN	31.900	7.800	7.700	7.600	8.000
N° 5	7.900	NaN	31.700	7.900	7.800	7.700	7.900
N° 6	8.100	NaN	31.600	7.800	7.600	7.700	8.100
N° 7(Off)	7.800	NaN	31.900	7.600	7.600	7.600	7.800
N° 8(Off)	8.100	NaN	31.900	8.100	7.900	7.800	8.100
N° 9(Off)	7.800	NaN	31.700	7.800	7.700	7.700	7.800
N° 10(Off)	7.900	NaN	31.700	7.700	7.600	7.500	7.900
N° 11(Off)	8.000	NaN	31.600	7.600	7.700	8.000	8.000

Delta [tPLZ_E]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	4.000E-1	0.000E+0	-1.000E-1	-1.000E-1	0.000E+0
N° 2	---	NaN	2.370E+1	0.000E+0	-2.000E-1	-4.000E-1	0.000E+0
N° 3	---	NaN	2.380E+1	0.000E+0	0.000E+0	-2.000E-1	0.000E+0
N° 4	---	NaN	2.390E+1	-2.000E-1	-3.000E-1	-4.000E-1	0.000E+0
N° 5	---	NaN	2.380E+1	0.000E+0	-1.000E-1	-2.000E-1	0.000E+0
N° 6	---	NaN	2.350E+1	-3.000E-1	-5.000E-1	-4.000E-1	0.000E+0
N° 7(Off)	---	NaN	2.410E+1	-2.000E-1	-2.000E-1	-2.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.380E+1	0.000E+0	-2.000E-1	-3.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.390E+1	0.000E+0	-1.000E-1	-1.000E-1	0.000E+0
N° 10(Off)	---	NaN	2.380E+1	-2.000E-1	-3.000E-1	-4.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.360E+1	-4.000E-1	-3.000E-1	0.000E+0	0.000E+0
Average	---	NaN	2.374E+1	-1.000E-1	-2.200E-1	-3.200E-1	0.000E+0
s	---	0.000E+0	1.517E-1	1.414E-1	1.924E-1	1.095E-1	0.000E+0
Average+3s	---	NaN	2.419E+1	3.243E-1	3.571E-1	8.634E-3	0.000E+0
Average-3s	---	NaN	2.329E+1	-5.243E-1	-7.971E-1	-6.486E-1	0.000E+0

12. VCL_E!

"Icl = 18mA"



VCL_E! . (V)

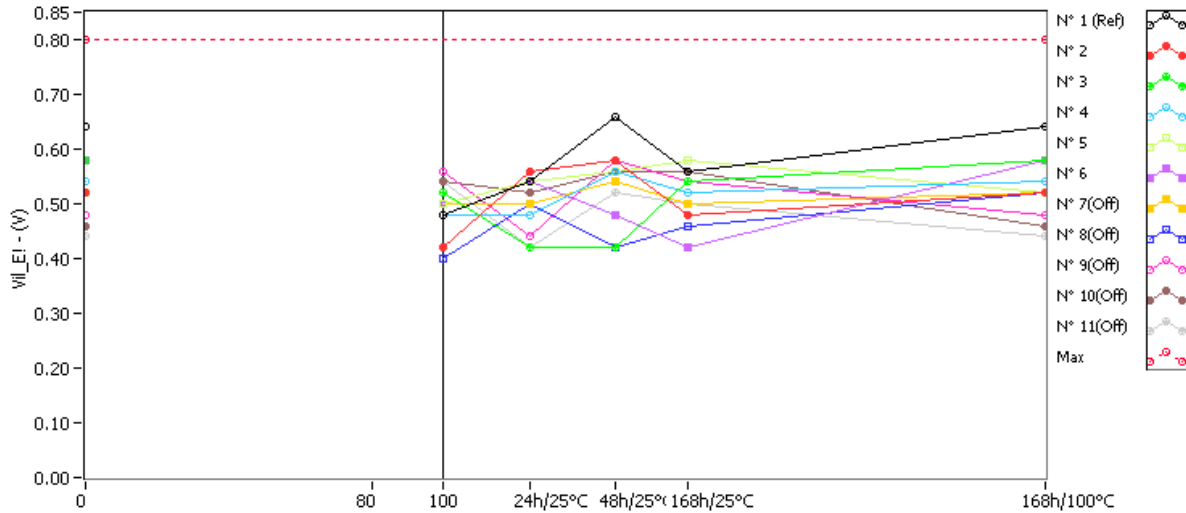
Min = -1.5

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-0.970	NaN	-0.907	-0.929	-0.920	-0.952	-0.970
N° 2	-0.940	NaN	-0.876	-0.926	-0.924	-0.885	-0.940
N° 3	-0.919	NaN	-0.886	-0.932	-0.967	-0.891	-0.919
N° 4	-0.920	NaN	-0.870	-0.944	-0.906	-0.886	-0.920
N° 5	-0.933	NaN	-0.995	-0.941	-0.947	-0.926	-0.933
N° 6	-0.913	NaN	-0.858	-0.939	-0.908	-0.884	-0.913
N° 7(Off)	-0.877	NaN	-0.861	-0.950	-0.949	-0.878	-0.877
N° 8(Off)	-0.876	NaN	-0.947	-0.984	-0.921	-0.868	-0.876
N° 9(Off)	-0.899	NaN	-0.885	-0.913	-0.905	-0.890	-0.899
N° 10(Off)	-0.897	NaN	-0.910	-0.933	-0.945	-0.938	-0.897
N° 11(Off)	-0.874	NaN	-0.932	-0.890	-0.969	-0.864	-0.874

Delta [VCL_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	6.300E-2	4.100E-2	5.000E-2	1.800E-2	0.000E+0
N° 2	---	NaN	6.400E-2	1.400E-2	1.600E-2	5.500E-2	0.000E+0
N° 3	---	NaN	3.300E-2	-1.300E-2	-4.800E-2	2.800E-2	0.000E+0
N° 4	---	NaN	5.000E-2	-2.400E-2	1.400E-2	3.400E-2	0.000E+0
N° 5	---	NaN	-6.200E-2	-8.000E-3	-1.400E-2	7.000E-3	0.000E+0
N° 6	---	NaN	5.500E-2	-2.600E-2	5.000E-3	2.900E-2	0.000E+0
N° 7(Off)	---	NaN	1.600E-2	-7.300E-2	-7.200E-2	-1.000E-3	0.000E+0
N° 8(Off)	---	NaN	-7.100E-2	-1.080E-1	-4.500E-2	8.000E-3	0.000E+0
N° 9(Off)	---	NaN	1.400E-2	-1.400E-2	-6.000E-3	9.000E-3	0.000E+0
N° 10(Off)	---	NaN	-1.300E-2	-3.600E-2	-4.800E-2	-4.100E-2	0.000E+0
N° 11(Off)	---	NaN	-5.800E-2	-1.600E-2	-9.500E-2	1.000E-2	0.000E+0
Average	---	NaN	2.800E-2	-1.140E-2	-5.400E-3	3.060E-2	0.000E+0
s	---	0.000E+0	5.156E-2	1.606E-2	2.660E-2	1.713E-2	0.000E+0
Average+3s	---	NaN	1.827E-1	3.677E-2	7.441E-2	8.198E-2	0.000E+0
Average-3s	---	NaN	-1.267E-1	-5.957E-2	-8.521E-2	-2.078E-2	0.000E+0

13. Vil_E!



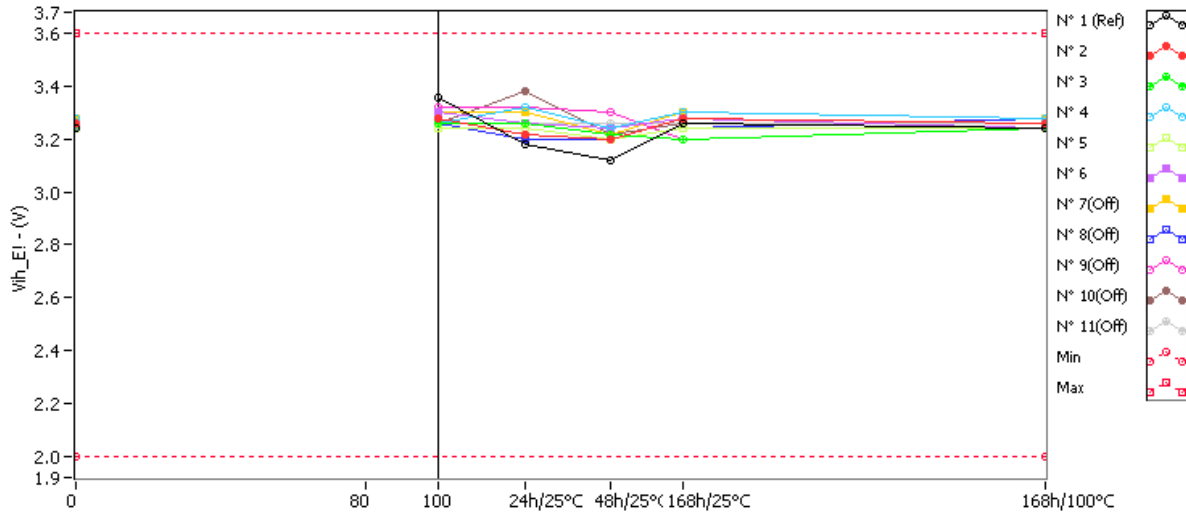
Vil_E! . (V) Max = 0.8

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.640	NaN	0.480	0.540	0.660	0.560	0.640
N° 2	0.520	NaN	0.420	0.560	0.580	0.480	0.520
N° 3	0.580	NaN	0.520	0.420	0.420	0.540	0.580
N° 4	0.540	NaN	0.480	0.480	0.560	0.520	0.540
N° 5	0.520	NaN	0.500	0.540	0.560	0.580	0.520
N° 6	0.580	NaN	0.500	0.540	0.480	0.420	0.580
N° 7(Off)	0.520	NaN	0.500	0.500	0.540	0.500	0.520
N° 8(Off)	0.520	NaN	0.400	0.500	0.420	0.460	0.520
N° 9(Off)	0.480	NaN	0.560	0.440	0.580	0.540	0.480
N° 10(Off)	0.460	NaN	0.540	0.520	0.560	0.560	0.460
N° 11(Off)	0.440	NaN	0.540	0.420	0.520	0.500	0.440

Delta [Vil_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.600E-1	-1.000E-1	2.000E-2	-8.000E-2	0.000E+0
N° 2	---	NaN	-1.000E-1	4.000E-2	6.000E-2	-4.000E-2	0.000E+0
N° 3	---	NaN	-6.000E-2	-1.600E-1	-1.600E-1	-4.000E-2	0.000E+0
N° 4	---	NaN	-6.000E-2	-6.000E-2	2.000E-2	-2.000E-2	0.000E+0
N° 5	---	NaN	-2.000E-2	2.000E-2	4.000E-2	6.000E-2	0.000E+0
N° 6	---	NaN	-8.000E-2	-4.000E-2	-1.000E-1	-1.600E-1	0.000E+0
N° 7(Off)	---	NaN	-2.000E-2	-2.000E-2	2.000E-2	-2.000E-2	0.000E+0
N° 8(Off)	---	NaN	-1.200E-1	-2.000E-2	-1.000E-1	-6.000E-2	0.000E+0
N° 9(Off)	---	NaN	8.000E-2	-4.000E-2	1.000E-1	6.000E-2	0.000E+0
N° 10(Off)	---	NaN	8.000E-2	6.000E-2	1.000E-1	1.000E-1	0.000E+0
N° 11(Off)	---	NaN	1.000E-1	-2.000E-2	8.000E-2	6.000E-2	0.000E+0
Average	---	NaN	-6.400E-2	-4.000E-2	-2.800E-2	-4.000E-2	0.000E+0
s	---	0.000E+0	2.966E-2	7.874E-2	9.654E-2	7.874E-2	0.000E+0
Average+3s	---	NaN	2.499E-2	1.962E-1	2.616E-1	1.962E-1	0.000E+0
Average-3s	---	NaN	-1.530E-1	-2.762E-1	-3.176E-1	-2.762E-1	0.000E+0

14. Vih_E!



Vih_E! . (V) Min = 2.0 Max = 3.6

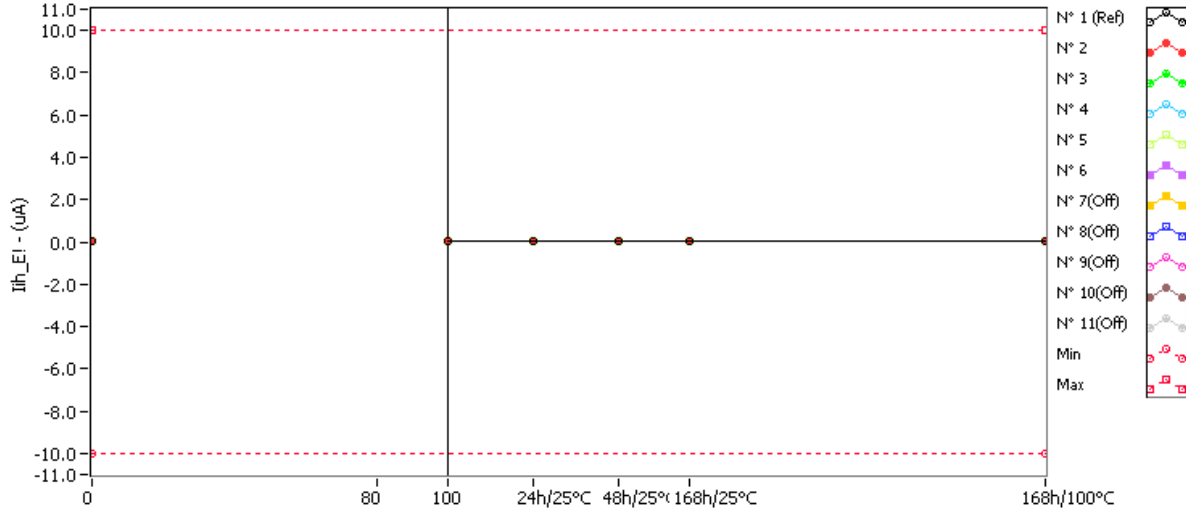
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.240	NaN	3.360	3.180	3.120	3.260	3.240
N° 2	3.260	NaN	3.280	3.220	3.200	3.280	3.260
N° 3	3.240	NaN	3.260	3.260	3.220	3.200	3.240
N° 4	3.280	NaN	3.260	3.320	3.240	3.300	3.280
N° 5	3.240	NaN	3.240	3.240	3.200	3.240	3.240
N° 6	3.240	NaN	3.300	3.260	3.240	3.280	3.240
N° 7(Off)	3.280	NaN	3.300	3.300	3.220	3.300	3.280
N° 8(Off)	3.280	NaN	3.260	3.200	3.200	3.240	3.280
N° 9(Off)	3.240	NaN	3.320	3.320	3.300	3.200	3.240
N° 10(Off)	3.240	NaN	3.260	3.380	3.220	3.260	3.240
N° 11(Off)	3.260	NaN	3.300	3.260	3.260	3.260	3.260

Delta [Vih_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	1.200E-1	-6.000E-2	-1.200E-1	2.000E-2	0.000E+0
N° 2	---	NaN	2.000E-2	-4.000E-2	-6.000E-2	2.000E-2	0.000E+0
N° 3	---	NaN	2.000E-2	2.000E-2	-2.000E-2	-4.000E-2	0.000E+0
N° 4	---	NaN	-2.000E-2	4.000E-2	-4.000E-2	2.000E-2	0.000E+0
N° 5	---	NaN	0.000E+0	0.000E+0	-4.000E-2	0.000E+0	0.000E+0
N° 6	---	NaN	6.000E-2	2.000E-2	0.000E+0	4.000E-2	0.000E+0
N° 7(Off)	---	NaN	2.000E-2	2.000E-2	-6.000E-2	2.000E-2	0.000E+0
N° 8(Off)	---	NaN	-2.000E-2	-8.000E-2	-8.000E-2	-4.000E-2	0.000E+0
N° 9(Off)	---	NaN	8.000E-2	8.000E-2	6.000E-2	-4.000E-2	0.000E+0
N° 10(Off)	---	NaN	2.000E-2	1.400E-1	-2.000E-2	2.000E-2	0.000E+0
N° 11(Off)	---	NaN	4.000E-2	0.000E+0	0.000E+0	0.000E+0	0.000E+0
Average	---	NaN	1.600E-2	8.000E-3	-3.200E-2	8.000E-3	0.000E+0
s	---	0.000E+0	2.966E-2	3.033E-2	2.280E-2	3.033E-2	0.000E+0
Average+3s	---	NaN	1.050E-1	9.899E-2	3.641E-2	9.899E-2	0.000E+0
Average-3s	---	NaN	-7.299E-2	-8.299E-2	-1.004E-1	-8.299E-2	0.000E+0

15. Iih_E!

"Vin = 3.6V ; Vcc = 3.6V ; Enable pins"



Iih_E! . (uA) Min = -10.0 Max = 10.0

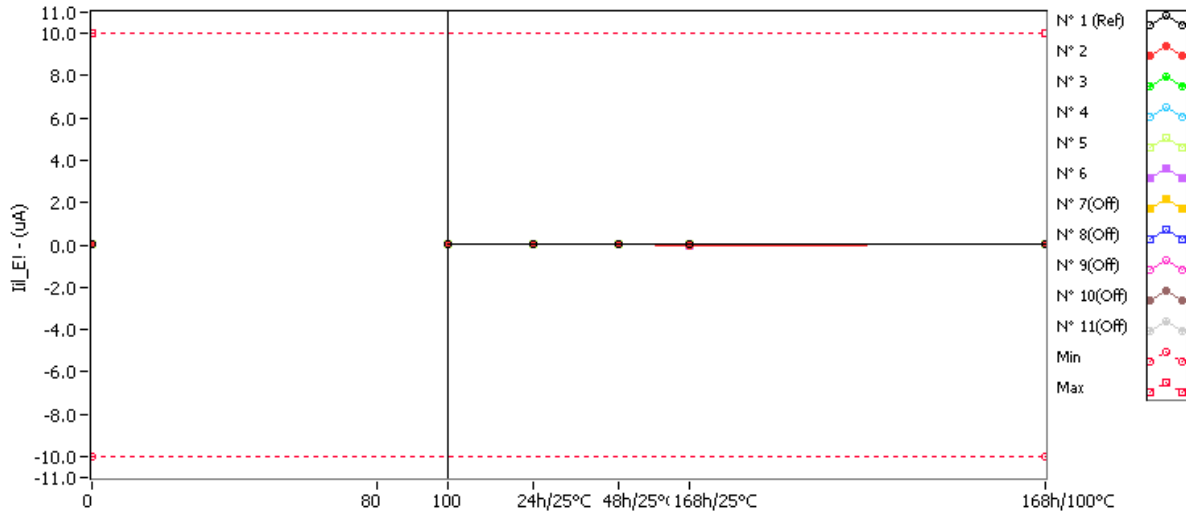
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000057	NaN	0.000047	0.000048	0.000052	0.000045	0.000057
N° 2	0.000040	NaN	0.000043	0.000036	0.000037	0.000035	0.000040
N° 3	0.000037	NaN	0.000035	0.000034	0.000034	0.000033	0.000037
N° 4	0.000038	NaN	0.000037	0.000038	0.000036	0.000034	0.000038
N° 5	0.000067	NaN	0.000067	0.000065	0.000070	0.000065	0.000067
N° 6	0.000036	NaN	0.000033	0.000031	0.000033	0.000033	0.000036
N° 7(Off)	0.000037	NaN	0.000035	0.000035	0.000036	0.000037	0.000037
N° 8(Off)	0.000037	NaN	0.000040	0.000039	0.000038	0.000039	0.000037
N° 9(Off)	0.000030	NaN	0.000036	0.000031	0.000032	0.000039	0.000030
N° 10(Off)	0.000034	NaN	0.000037	0.000036	0.000037	0.000044	0.000034
N° 11(Off)	0.000034	NaN	0.000037	0.000035	0.000036	0.000038	0.000034

Delta [Iih_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.000E-5	-9.000E-6	-5.000E-6	-1.200E-5	0.000E+0
N° 2	---	NaN	3.000E-6	-4.000E-6	-3.000E-6	-5.000E-6	0.000E+0
N° 3	---	NaN	-2.000E-6	-3.000E-6	-3.000E-6	-4.000E-6	0.000E+0
N° 4	---	NaN	-1.000E-6	0.000E+0	-2.000E-6	-4.000E-6	0.000E+0
N° 5	---	NaN	0.000E+0	-2.000E-6	3.000E-6	-2.000E-6	0.000E+0
N° 6	---	NaN	-3.000E-6	-5.000E-6	-3.000E-6	-3.000E-6	0.000E+0
N° 7(Off)	---	NaN	-2.000E-6	-2.000E-6	-1.000E-6	0.000E+0	0.000E+0
N° 8(Off)	---	NaN	3.000E-6	2.000E-6	1.000E-6	2.000E-6	0.000E+0
N° 9(Off)	---	NaN	6.000E-6	1.000E-6	2.000E-6	9.000E-6	0.000E+0
N° 10(Off)	---	NaN	3.000E-6	2.000E-6	3.000E-6	1.000E-5	0.000E+0
N° 11(Off)	---	NaN	3.000E-6	1.000E-6	2.000E-6	4.000E-6	0.000E+0
Average	---	NaN	-6.000E-7	-2.800E-6	-1.600E-6	-3.600E-6	0.000E+0
s	---	0.000E+0	2.302E-6	1.924E-6	2.608E-6	1.140E-6	0.000E+0
Average+3s	---	NaN	6.307E-6	2.971E-6	6.223E-6	-1.795E-7	0.000E+0
Average-3s	---	NaN	-7.507E-6	-8.571E-6	-9.423E-6	-7.021E-6	0.000E+0

16. Iil_E!

"Vin = 3.6V ; Vcc = 3.6V ; Enable pins"



Iil_E! . (uA) Min = -10.0 Max = 10.0

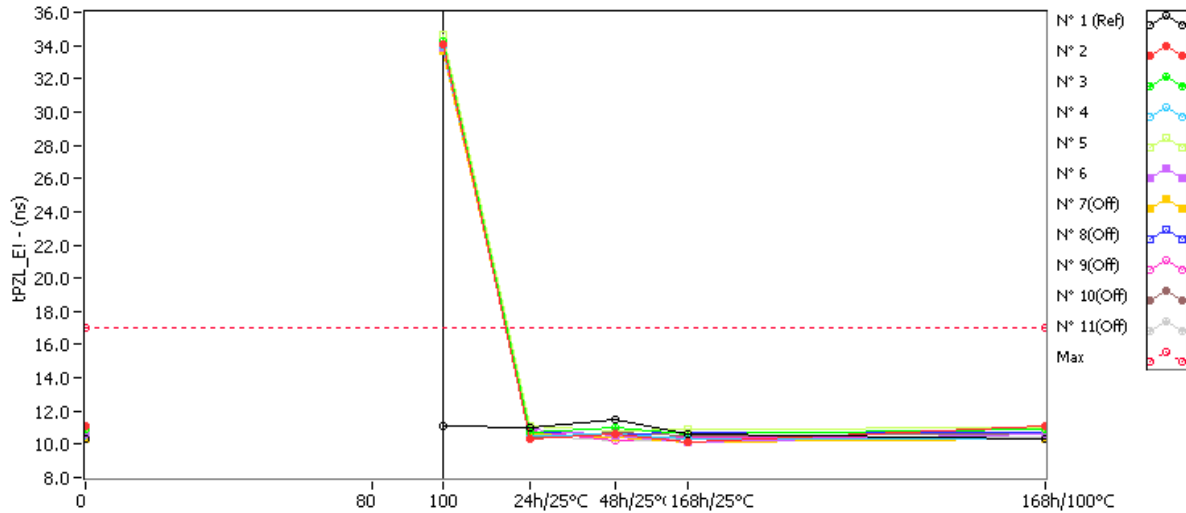
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000014	NaN	0.000011	0.000013	0.000014	0.000003	0.000014
N° 2	0.000013	NaN	0.000009	0.000008	0.000009	-0.000004	0.000013
N° 3	0.000012	NaN	0.000009	0.000009	0.000009	-0.000008	0.000012
N° 4	0.000011	NaN	0.000008	0.000009	0.000009	-0.000014	0.000011
N° 5	0.000025	NaN	0.000023	0.000022	0.000025	0.000006	0.000025
N° 6	0.000011	NaN	0.000008	0.000008	0.000007	-0.000011	0.000011
N° 7(Off)	0.000011	NaN	0.000009	0.000009	0.000010	-0.000007	0.000011
N° 8(Off)	0.000012	NaN	0.000012	0.000012	0.000012	-0.000002	0.000012
N° 9(Off)	0.000007	NaN	0.000007	0.000007	0.000006	-0.000001	0.000007
N° 10(Off)	0.000009	NaN	0.000009	0.000009	0.000009	0.000005	0.000009
N° 11(Off)	0.000009	NaN	0.000009	0.000009	0.000010	0.000005	0.000009

Delta [Iil_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-3.000E-6	-1.000E-6	0.000E+0	-1.100E-5	0.000E+0
N° 2	---	NaN	-4.000E-6	-5.000E-6	-4.000E-6	-1.700E-5	0.000E+0
N° 3	---	NaN	-3.000E-6	-3.000E-6	-3.000E-6	-2.000E-5	0.000E+0
N° 4	---	NaN	-3.000E-6	-2.000E-6	-2.000E-6	-2.500E-5	0.000E+0
N° 5	---	NaN	-2.000E-6	-3.000E-6	0.000E+0	-1.900E-5	0.000E+0
N° 6	---	NaN	-3.000E-6	-3.000E-6	-4.000E-6	-2.200E-5	0.000E+0
N° 7(Off)	---	NaN	-2.000E-6	-2.000E-6	-1.000E-6	-1.800E-5	0.000E+0
N° 8(Off)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.400E-5	0.000E+0
N° 9(Off)	---	NaN	0.000E+0	0.000E+0	-1.000E-6	-8.000E-6	0.000E+0
N° 10(Off)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-4.000E-6	0.000E+0
N° 11(Off)	---	NaN	0.000E+0	0.000E+0	1.000E-6	-4.000E-6	0.000E+0
Average	---	NaN	-3.000E-6	-3.200E-6	-2.600E-6	-2.060E-5	0.000E+0
s	---	0.000E+0	7.071E-7	1.095E-6	1.673E-6	3.050E-6	0.000E+0
Average+3s	---	NaN	-8.787E-7	8.634E-8	2.420E-6	-1.145E-5	0.000E+0
Average-3s	---	NaN	-5.121E-6	-6.486E-6	-7.620E-6	-2.975E-5	0.000E+0

17. tPZL_E!

"Input pulse = 0V to 3V ; Vin = 1.5V ; Vout = 50% ; RL = 1k"



tPZL_E! . (ns)

Max = 17.0

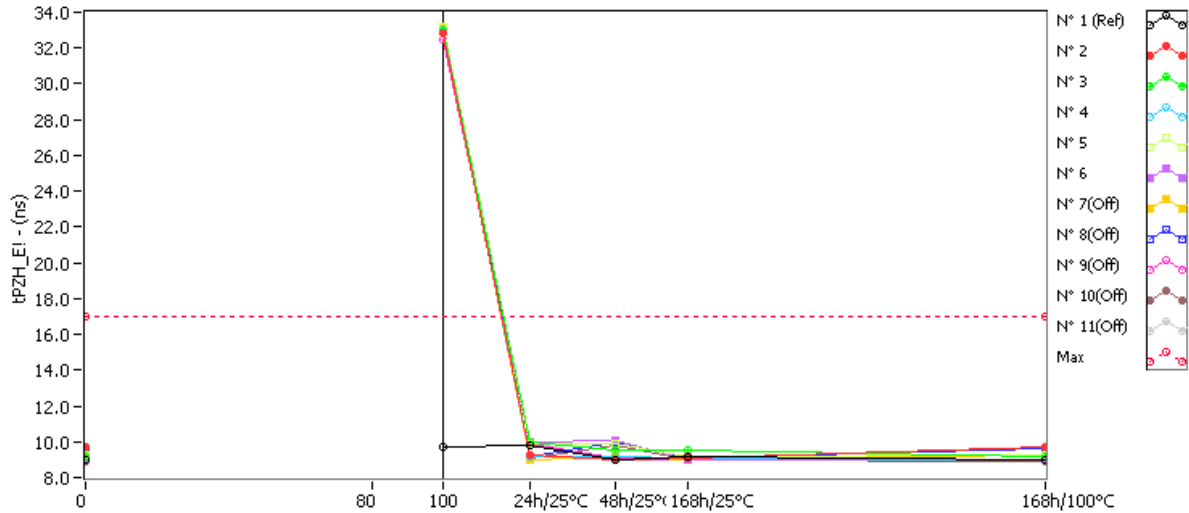
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	10.300	NaN	11.100	11.000	11.500	10.600	10.300
N° 2	11.100	NaN	34.100	10.300	10.600	10.100	11.100
N° 3	10.900	NaN	34.300	10.700	11.000	10.600	10.900
N° 4	10.300	NaN	34.000	10.500	10.600	10.300	10.300
N° 5	11.000	NaN	34.600	11.100	10.800	10.900	11.000
N° 6	10.600	NaN	33.900	10.900	10.500	10.100	10.600
N° 7(Off)	10.300	NaN	33.700	10.600	10.400	10.100	10.300
N° 8(Off)	10.700	NaN	34.300	10.700	10.600	10.700	10.700
N° 9(Off)	10.300	NaN	33.900	10.800	10.200	10.400	10.300
N° 10(Off)	10.600	NaN	34.100	10.400	10.700	10.500	10.600
N° 11(Off)	10.400	NaN	34.100	10.500	10.200	10.300	10.400

Delta [tPZL_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	8.000E-1	7.000E-1	1.200E+0	3.000E-1	0.000E+0
N° 2	---	NaN	2.300E+1	-8.000E-1	-5.000E-1	-1.000E+0	0.000E+0
N° 3	---	NaN	2.340E+1	-2.000E-1	1.000E-1	-3.000E-1	0.000E+0
N° 4	---	NaN	2.370E+1	2.000E-1	3.000E-1	0.000E+0	0.000E+0
N° 5	---	NaN	2.360E+1	1.000E-1	-2.000E-1	-1.000E-1	0.000E+0
N° 6	---	NaN	2.330E+1	3.000E-1	-1.000E-1	-5.000E-1	0.000E+0
N° 7(Off)	---	NaN	2.340E+1	3.000E-1	1.000E-1	-2.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.360E+1	0.000E+0	-1.000E-1	0.000E+0	0.000E+0
N° 9(Off)	---	NaN	2.360E+1	5.000E-1	-1.000E-1	1.000E-1	0.000E+0
N° 10(Off)	---	NaN	2.350E+1	-2.000E-1	1.000E-1	-1.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.370E+1	1.000E-1	-2.000E-1	-1.000E-1	0.000E+0
Average	---	NaN	2.340E+1	-8.000E-2	-8.000E-2	-3.800E-1	0.000E+0
s	---	0.000E+0	2.739E-1	4.438E-1	3.033E-1	3.962E-1	0.000E+0
Average+3s	---	NaN	2.422E+1	1.252E+0	8.299E-1	8.087E-1	0.000E+0
Average-3s	---	NaN	2.258E+1	-1.412E+0	-9.899E-1	-1.569E+0	0.000E+0

18. tPZH_E!

"Input pulse = 0V to 3V ; Vin = 1.5V ; Vout = 50% ; RL = 1k"



tPZH_E! . (ns)

Max = 17.0

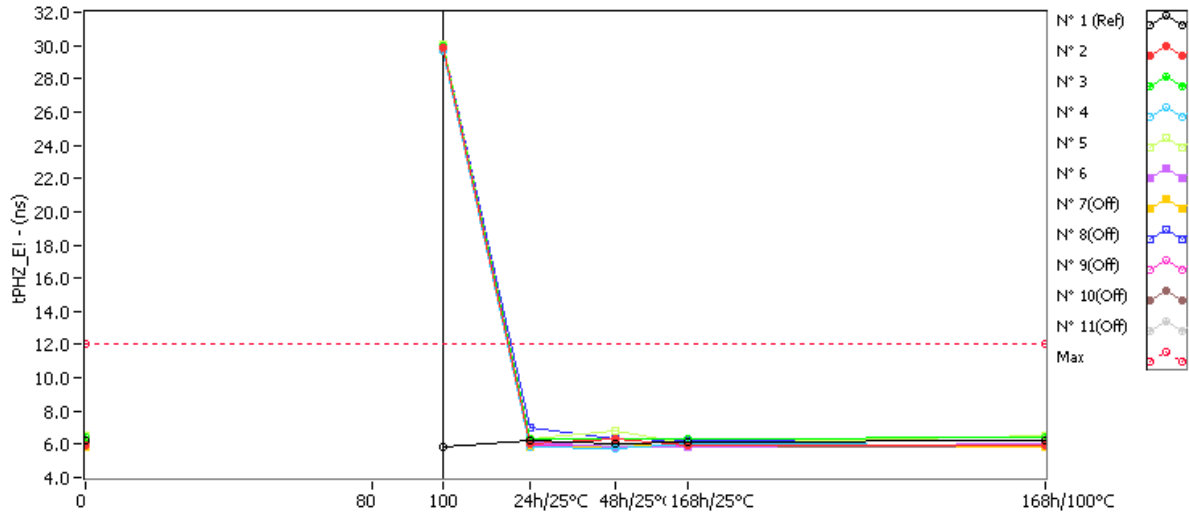
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	9.000	NaN	9.700	9.800	9.000	9.200	9.000
N° 2	9.700	NaN	32.800	9.300	9.000	9.100	9.700
N° 3	9.200	NaN	33.000	10.000	9.500	9.500	9.200
N° 4	9.000	NaN	32.900	9.200	9.200	9.100	9.000
N° 5	9.300	NaN	33.200	9.900	9.900	9.200	9.300
N° 6	9.000	NaN	33.000	10.000	10.100	9.000	9.000
N° 7(Off)	9.300	NaN	33.100	9.000	9.200	9.000	9.300
N° 8(Off)	9.600	NaN	33.200	9.200	10.000	9.100	9.600
N° 9(Off)	9.000	NaN	32.500	9.900	9.100	9.000	9.000
N° 10(Off)	8.900	NaN	32.900	9.100	9.800	9.000	8.900
N° 11(Off)	9.000	NaN	32.500	10.000	9.000	9.000	9.000

Delta [tPZH_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	7.000E-1	8.000E-1	0.000E+0	2.000E-1	0.000E+0
N° 2	---	NaN	2.310E+1	-4.000E-1	-7.000E-1	-6.000E-1	0.000E+0
N° 3	---	NaN	2.380E+1	8.000E-1	3.000E-1	3.000E-1	0.000E+0
N° 4	---	NaN	2.390E+1	2.000E-1	2.000E-1	1.000E-1	0.000E+0
N° 5	---	NaN	2.390E+1	6.000E-1	6.000E-1	-1.000E-1	0.000E+0
N° 6	---	NaN	2.400E+1	1.000E+0	1.100E+0	0.000E+0	0.000E+0
N° 7(Off)	---	NaN	2.380E+1	-3.000E-1	-1.000E-1	-3.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.360E+1	-4.000E-1	4.000E-1	-5.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.350E+1	9.000E-1	1.000E-1	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	2.400E+1	2.000E-1	9.000E-1	1.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.350E+1	1.000E+0	0.000E+0	0.000E+0	0.000E+0
Average	---	NaN	2.374E+1	4.400E-1	3.000E-1	-6.000E-2	0.000E+0
s	---	0.000E+0	3.647E-1	5.550E-1	6.595E-1	3.362E-1	0.000E+0
Average+3s	---	NaN	2.483E+1	2.105E+0	2.279E+0	9.485E-1	0.000E+0
Average-3s	---	NaN	2.265E+1	-1.225E+0	-1.679E+0	-1.068E+0	0.000E+0

19. tPHZ_E!

"Input pulse = 0V to 3V ; Vin = 1.5V ; RL = 1k ; Vout = Voh-0.5V"



tPHZ_E! . (ns)

Max = 12.0

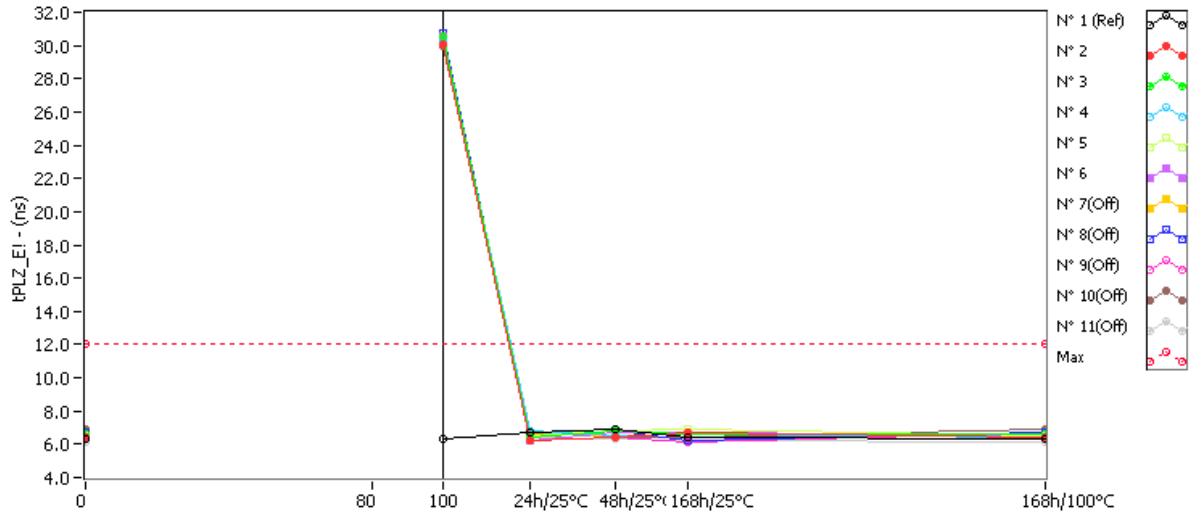
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	6.200	NaN	5.800	6.200	6.000	6.100	6.200
N° 2	5.900	NaN	29.900	6.000	6.300	5.900	5.900
N° 3	6.400	NaN	30.000	6.300	6.300	6.300	6.400
N° 4	5.900	NaN	29.700	5.800	5.700	6.000	5.900
N° 5	6.500	NaN	30.100	6.300	6.800	6.000	6.500
N° 6	6.000	NaN	29.900	6.100	5.800	5.800	6.000
N° 7(Off)	5.800	NaN	30.000	5.800	5.800	6.000	5.800
N° 8(Off)	6.200	NaN	30.100	7.000	6.300	6.200	6.200
N° 9(Off)	5.900	NaN	30.000	5.900	5.800	5.900	5.900
N° 10(Off)	5.800	NaN	29.800	5.900	5.800	5.800	5.800
N° 11(Off)	6.000	NaN	29.800	5.900	5.900	5.800	6.000

Delta [tPHZ_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-4.000E-1	0.000E+0	-2.000E-1	-1.000E-1	0.000E+0
N° 2	---	NaN	2.400E+1	1.000E-1	4.000E-1	0.000E+0	0.000E+0
N° 3	---	NaN	2.360E+1	-1.000E-1	-1.000E-1	-1.000E-1	0.000E+0
N° 4	---	NaN	2.380E+1	-1.000E-1	-2.000E-1	1.000E-1	0.000E+0
N° 5	---	NaN	2.360E+1	-2.000E-1	3.000E-1	-5.000E-1	0.000E+0
N° 6	---	NaN	2.390E+1	1.000E-1	-2.000E-1	-2.000E-1	0.000E+0
N° 7(Off)	---	NaN	2.420E+1	0.000E+0	0.000E+0	2.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.390E+1	8.000E-1	1.000E-1	0.000E+0	0.000E+0
N° 9(Off)	---	NaN	2.410E+1	0.000E+0	-1.000E-1	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	2.400E+1	1.000E-1	0.000E+0	0.000E+0	0.000E+0
N° 11(Off)	---	NaN	2.380E+1	-1.000E-1	-1.000E-1	-2.000E-1	0.000E+0
Average	---	NaN	2.378E+1	-4.000E-2	4.000E-2	-1.400E-1	0.000E+0
s	---	0.000E+0	1.789E-1	1.342E-1	2.881E-1	2.302E-1	0.000E+0
Average+3s	---	NaN	2.432E+1	3.625E-1	9.043E-1	5.507E-1	0.000E+0
Average-3s	---	NaN	2.324E+1	-4.425E-1	-8.243E-1	-8.307E-1	0.000E+0

20. tPLZ_E!

"Input pulse = 0V to 3V ; Vin = 1.5V ; RL = 1k ; Vout = Vol+0.5V"



tPLZ_E! . (ns) Max = 12.0

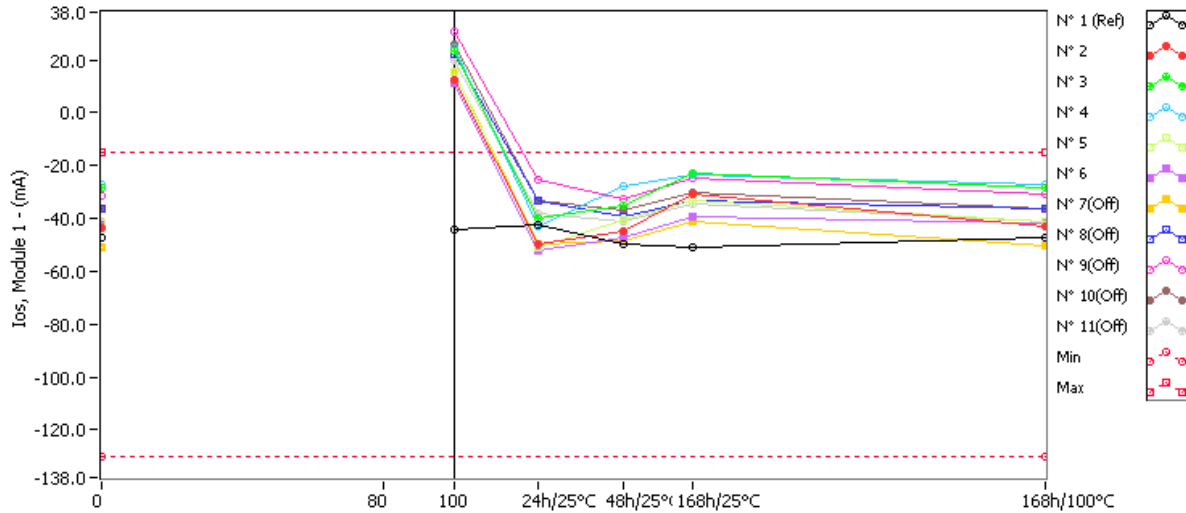
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	6.300	NaN	6.300	6.700	6.900	6.400	6.300
N° 2	6.400	NaN	30.100	6.200	6.400	6.700	6.400
N° 3	6.600	NaN	30.500	6.400	6.800	6.600	6.600
N° 4	6.400	NaN	30.400	6.800	6.500	6.600	6.400
N° 5	6.500	NaN	30.200	6.500	6.800	6.900	6.500
N° 6	6.500	NaN	30.500	6.200	6.700	6.700	6.500
N° 7(Off)	6.500	NaN	30.300	6.600	6.500	6.600	6.500
N° 8(Off)	6.700	NaN	30.700	6.400	6.800	6.200	6.700
N° 9(Off)	6.700	NaN	30.400	6.800	6.400	6.100	6.700
N° 10(Off)	6.900	NaN	30.000	6.800	6.400	6.400	6.900
N° 11(Off)	6.100	NaN	30.400	6.400	6.300	6.200	6.100

Delta [tPLZ_E!]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	0.000E+0	4.000E-1	6.000E-1	1.000E-1	0.000E+0
N° 2	---	NaN	2.370E+1	-2.000E-1	0.000E+0	3.000E-1	0.000E+0
N° 3	---	NaN	2.390E+1	-2.000E-1	2.000E-1	0.000E+0	0.000E+0
N° 4	---	NaN	2.400E+1	4.000E-1	1.000E-1	2.000E-1	0.000E+0
N° 5	---	NaN	2.370E+1	0.000E+0	3.000E-1	4.000E-1	0.000E+0
N° 6	---	NaN	2.400E+1	-3.000E-1	2.000E-1	2.000E-1	0.000E+0
N° 7(Off)	---	NaN	2.380E+1	1.000E-1	0.000E+0	1.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.400E+1	-3.000E-1	1.000E-1	-5.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.370E+1	1.000E-1	-3.000E-1	-6.000E-1	0.000E+0
N° 10(Off)	---	NaN	2.310E+1	-1.000E-1	-5.000E-1	-5.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.430E+1	3.000E-1	2.000E-1	1.000E-1	0.000E+0
Average	---	NaN	2.386E+1	-6.000E-2	1.600E-1	2.200E-1	0.000E+0
s	---	0.000E+0	1.517E-1	2.793E-1	1.140E-1	1.483E-1	0.000E+0
Average+3s	---	NaN	2.431E+1	7.779E-1	5.021E-1	6.650E-1	0.000E+0
Average-3s	---	NaN	2.341E+1	-8.979E-1	-1.821E-1	-2.250E-1	0.000E+0

21. Ios, Module 1

"Enabled ; Vout = 0V or VCC"



Ios, Module 1 . (mA)

Min = -130.0 Max = -15.0

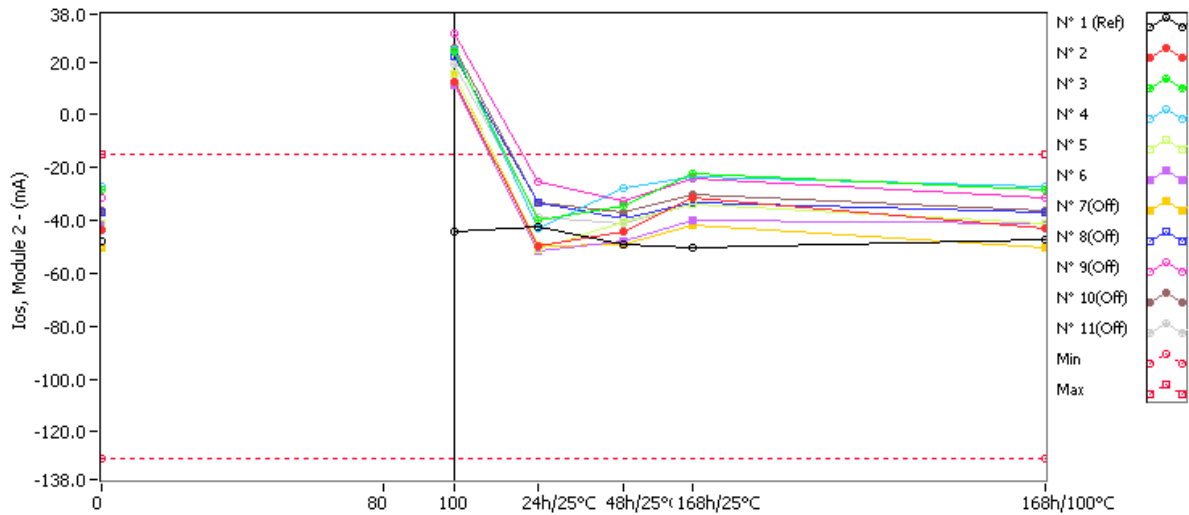
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-47.2	NaN	-44.3	-42.5	-49.8	-50.9	-47.2
N° 2	-43.5	NaN	12.5	-49.8	-44.9	-31.1	-43.1
N° 3	-28.5	NaN	23.3	-39.7	-34.8	-22.6	-28.5
N° 4	-27.4	NaN	24.5	-42.7	-27.8	-23.5	-27.1
N° 5	-41.7	NaN	15.5	-50.8	-40.5	-33.2	-41.3
N° 6	-41.8	NaN	11.5	-51.9	-47.2	-39.5	-41.6
N° 7(Off)	-50.8	NaN	15.2	-49.6	-48.4	-41.2	-50.2
N° 8(Off)	-36.5	NaN	22.4	-33.2	-39.1	-33.5	-36.3
N° 9(Off)	-31.7	NaN	30.8	-25.4	-32.7	-24.5	-31.1
N° 10(Off)	-36.4	NaN	25.7	-33.1	-37.1	-30.5	-36.1
N° 11(Off)	-41.4	NaN	19.8	-38.4	-41.4	-34.3	-41.3

Delta [Ios, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	2.900E+0	4.700E+0	-2.600E+0	-3.700E+0	0.000E+0
N° 2	---	NaN	5.600E+1	-6.300E+0	-1.400E+0	1.240E+1	4.000E-1
N° 3	---	NaN	5.180E+1	-1.120E+1	-6.300E+0	5.900E+0	0.000E+0
N° 4	---	NaN	5.190E+1	-1.530E+1	-4.000E-1	3.900E+0	3.000E-1
N° 5	---	NaN	5.720E+1	-9.100E+0	1.200E+0	8.500E+0	4.000E-1
N° 6	---	NaN	5.330E+1	-1.010E+1	-5.400E+0	2.300E+0	2.000E-1
N° 7(Off)	---	NaN	6.600E+1	1.200E+0	2.400E+0	9.600E+0	6.000E-1
N° 8(Off)	---	NaN	5.890E+1	3.300E+0	-2.600E+0	3.000E+0	2.000E-1
N° 9(Off)	---	NaN	6.250E+1	6.300E+0	-1.000E+0	7.200E+0	6.000E-1
N° 10(Off)	---	NaN	6.210E+1	3.300E+0	-7.000E-1	5.900E+0	3.000E-1
N° 11(Off)	---	NaN	6.120E+1	3.000E+0	0.000E+0	7.100E+0	1.000E-1
Average	---	NaN	5.404E+1	-1.040E+1	-2.460E+0	6.600E+0	2.600E-1
s	---	0.000E+0	2.448E+0	3.288E+0	3.246E+0	3.985E+0	1.673E-1
Average+3s	---	NaN	6.138E+1	-5.364E-1	7.279E+0	1.855E+1	7.620E-1
Average-3s	---	NaN	4.670E+1	-2.026E+1	-1.220E+1	-5.355E+0	-2.420E-1

22. Ios, Module 2

"Enabled ; Vout = 0V or VCC"



Ios, Module 2 . (mA)

Min = -130.0 Max = -15.0

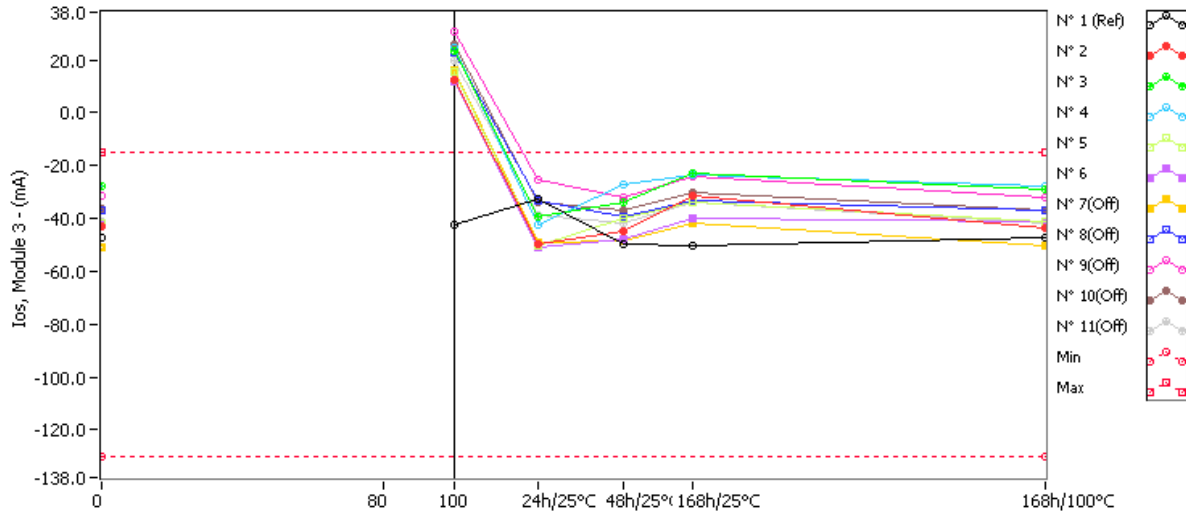
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-47.6	NaN	-44.0	-42.2	-49.1	-50.2	-47.2
N° 2	-43.5	NaN	12.7	-49.8	-44.3	-31.2	-43.0
N° 3	-28.5	NaN	23.7	-39.7	-34.5	-22.5	-28.4
N° 4	-27.2	NaN	24.8	-42.7	-27.7	-23.4	-27.0
N° 5	-41.4	NaN	15.5	-50.7	-40.8	-33.7	-41.2
N° 6	-41.7	NaN	11.1	-51.7	-47.7	-39.9	-41.4
N° 7(Off)	-50.4	NaN	15.2	-49.7	-48.9	-41.8	-50.5
N° 8(Off)	-36.7	NaN	22.0	-33.1	-39.5	-33.4	-36.9
N° 9(Off)	-31.2	NaN	30.5	-25.4	-32.5	-24.2	-31.7
N° 10(Off)	-36.1	NaN	25.0	-33.5	-37.0	-30.1	-36.6
N° 11(Off)	-41.0	NaN	19.0	-38.7	-41.2	-34.0	-41.0

Delta [Ios, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	3.600E+0	5.400E+0	-1.500E+0	-2.600E+0	4.000E-1
N° 2	---	NaN	5.620E+1	-6.300E+0	-8.000E-1	1.230E+1	5.000E-1
N° 3	---	NaN	5.220E+1	-1.120E+1	-6.000E+0	6.000E+0	1.000E-1
N° 4	---	NaN	5.200E+1	-1.550E+1	-5.000E-1	3.800E+0	2.000E-1
N° 5	---	NaN	5.690E+1	-9.300E+0	6.000E-1	7.700E+0	2.000E-1
N° 6	---	NaN	5.280E+1	-1.000E+1	-6.000E+0	1.800E+0	3.000E-1
N° 7(Off)	---	NaN	6.560E+1	7.000E-1	1.500E+0	8.600E+0	-1.000E-1
N° 8(Off)	---	NaN	5.870E+1	3.600E+0	-2.800E+0	3.300E+0	-2.000E-1
N° 9(Off)	---	NaN	6.170E+1	5.800E+0	-1.300E+0	7.000E+0	-5.000E-1
N° 10(Off)	---	NaN	6.110E+1	2.600E+0	-9.000E-1	6.000E+0	-5.000E-1
N° 11(Off)	---	NaN	6.000E+1	2.300E+0	-2.000E-1	7.000E+0	0.000E+0
Average	---	NaN	5.402E+1	-1.046E+1	-2.540E+0	6.320E+0	2.600E-1
s	---	0.000E+0	2.341E+0	3.347E+0	3.201E+0	4.017E+0	1.517E-1
Average+3s	---	NaN	6.104E+1	-4.187E-1	7.064E+0	1.837E+1	7.150E-1
Average-3s	---	NaN	4.700E+1	-2.050E+1	-1.214E+1	-5.731E+0	-1.950E-1

23. Ios, Module 3

"Enabled ; Vout = 0V or VCC"



Ios, Module 3 . (mA)

Min = -130.0 Max = -15.0

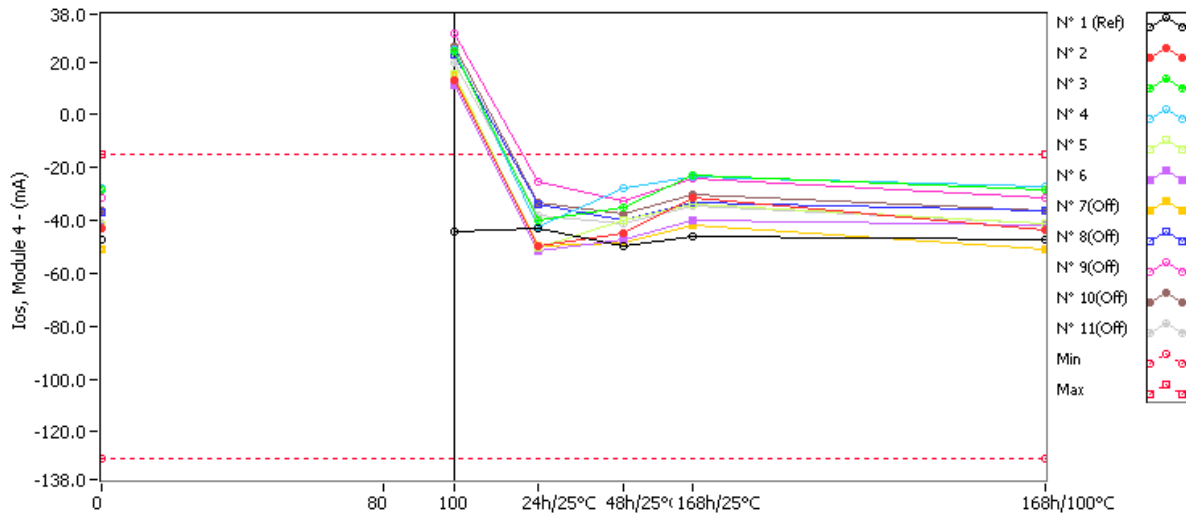
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-47.2	NaN	-42.2	-32.8	-49.8	-50.2	-47.2
N° 2	-43.0	NaN	12.2	-49.6	-44.6	-31.3	-43.9
N° 3	-28.0	NaN	23.4	-39.4	-34.0	-22.6	-28.8
N° 4	-27.6	NaN	24.5	-42.5	-27.2	-23.8	-27.7
N° 5	-41.7	NaN	15.7	-50.2	-40.2	-33.7	-41.2
N° 6	-41.8	NaN	11.8	-51.1	-47.9	-39.9	-41.4
N° 7(Off)	-50.9	NaN	15.8	-49.3	-48.6	-41.8	-50.6
N° 8(Off)	-36.8	NaN	22.7	-33.2	-39.1	-33.5	-36.9
N° 9(Off)	-31.2	NaN	30.8	-25.4	-32.3	-24.2	-31.8
N° 10(Off)	-36.6	NaN	25.9	-33.7	-37.0	-30.2	-36.8
N° 11(Off)	-41.1	NaN	19.9	-38.8	-41.7	-34.1	-41.7

Delta [Ios, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	5.000E+0	1.440E+1	-2.600E+0	-3.000E+0	0.000E+0
N° 2	---	NaN	5.520E+1	-6.600E+0	-1.600E+0	1.170E+1	-9.000E-1
N° 3	---	NaN	5.140E+1	-1.140E+1	-6.000E+0	5.400E+0	-8.000E-1
N° 4	---	NaN	5.210E+1	-1.490E+1	4.000E-1	3.800E+0	-1.000E-1
N° 5	---	NaN	5.740E+1	-8.500E+0	1.500E+0	8.000E+0	5.000E-1
N° 6	---	NaN	5.360E+1	-9.300E+0	-6.100E+0	1.900E+0	4.000E-1
N° 7(Off)	---	NaN	6.670E+1	1.600E+0	2.300E+0	9.100E+0	3.000E-1
N° 8(Off)	---	NaN	5.950E+1	3.600E+0	-2.300E+0	3.300E+0	-1.000E-1
N° 9(Off)	---	NaN	6.200E+1	5.800E+0	-1.100E+0	7.000E+0	-6.000E-1
N° 10(Off)	---	NaN	6.250E+1	2.900E+0	-4.000E-1	6.400E+0	-2.000E-1
N° 11(Off)	---	NaN	6.100E+1	2.300E+0	-6.000E-1	7.000E+0	-6.000E-1
Average	---	NaN	5.394E+1	-1.014E+1	-2.360E+0	6.160E+0	-1.800E-1
s	---	0.000E+0	2.424E+0	3.169E+0	3.547E+0	3.820E+0	6.535E-1
Average+3s	---	NaN	6.121E+1	-6.328E-1	8.282E+0	1.762E+1	1.780E+0
Average-3s	---	NaN	4.667E+1	-1.965E+1	-1.300E+1	-5.300E+0	-2.140E+0

24. Ios, Module 4

"Enabled ; Vout = 0V or VCC"



Ios, Module 4 . (mA)

Min = -130.0 Max = -15.0

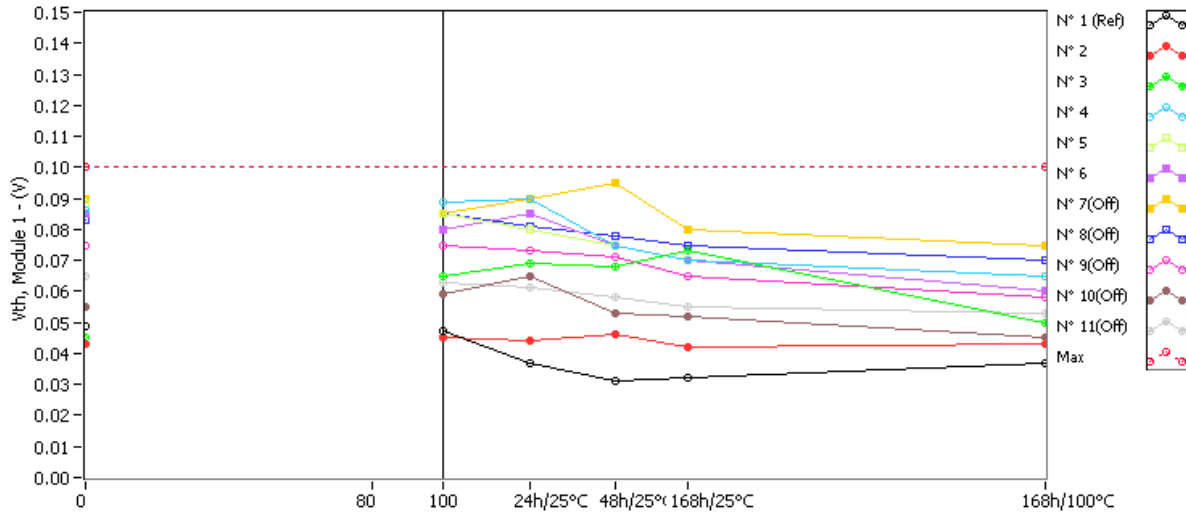
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-47.2	NaN	-44.1	-42.7	-49.8	-45.9	-47.3
N° 2	-43.3	NaN	12.9	-49.8	-44.8	-31.6	-43.8
N° 3	-28.6	NaN	23.7	-39.9	-34.8	-22.9	-28.5
N° 4	-27.8	NaN	24.4	-42.6	-27.5	-23.8	-27.2
N° 5	-41.9	NaN	15.5	-50.5	-40.1	-33.7	-41.2
N° 6	-41.9	NaN	11.2	-51.7	-47.4	-39.9	-41.5
N° 7(Off)	-50.8	NaN	15.1	-49.8	-48.7	-41.8	-50.7
N° 8(Off)	-36.7	NaN	22.7	-33.9	-39.8	-33.5	-36.4
N° 9(Off)	-31.5	NaN	30.6	-25.5	-32.6	-24.4	-31.5
N° 10(Off)	-36.2	NaN	25.8	-33.4	-37.4	-30.2	-36.2
N° 11(Off)	-41.0	NaN	19.9	-38.1	-41.4	-34.4	-41.0

Delta [Ios, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	3.100E+0	4.500E+0	-2.600E+0	1.300E+0	-1.000E-1
N° 2	---	NaN	5.620E+1	-6.500E+0	-1.500E+0	1.170E+1	-5.000E-1
N° 3	---	NaN	5.230E+1	-1.130E+1	-6.200E+0	5.700E+0	1.000E-1
N° 4	---	NaN	5.220E+1	-1.480E+1	3.000E-1	4.000E+0	6.000E-1
N° 5	---	NaN	5.740E+1	-8.600E+0	1.800E+0	8.200E+0	7.000E-1
N° 6	---	NaN	5.310E+1	-9.800E+0	-5.500E+0	2.000E+0	4.000E-1
N° 7(Off)	---	NaN	6.590E+1	1.000E+0	2.100E+0	9.000E+0	1.000E-1
N° 8(Off)	---	NaN	5.940E+1	2.800E+0	-3.100E+0	3.200E+0	3.000E-1
N° 9(Off)	---	NaN	6.210E+1	6.000E+0	-1.100E+0	7.100E+0	0.000E+0
N° 10(Off)	---	NaN	6.200E+1	2.800E+0	-1.200E+0	6.000E+0	0.000E+0
N° 11(Off)	---	NaN	6.090E+1	2.900E+0	-4.000E-1	6.600E+0	0.000E+0
Average	---	NaN	5.424E+1	-1.020E+1	-2.220E+0	6.320E+0	2.600E-1
s	---	0.000E+0	2.401E+0	3.114E+0	3.522E+0	3.772E+0	4.827E-1
Average+3s	---	NaN	6.144E+1	-8.590E-1	8.347E+0	1.764E+1	1.708E+0
Average-3s	---	NaN	4.704E+1	-1.954E+1	-1.279E+1	-4.996E+0	-1.188E+0

25. Vth, Module 1

"Vcm = +1.2V"



Vth, Module 1 . (V)

Max = 0.1

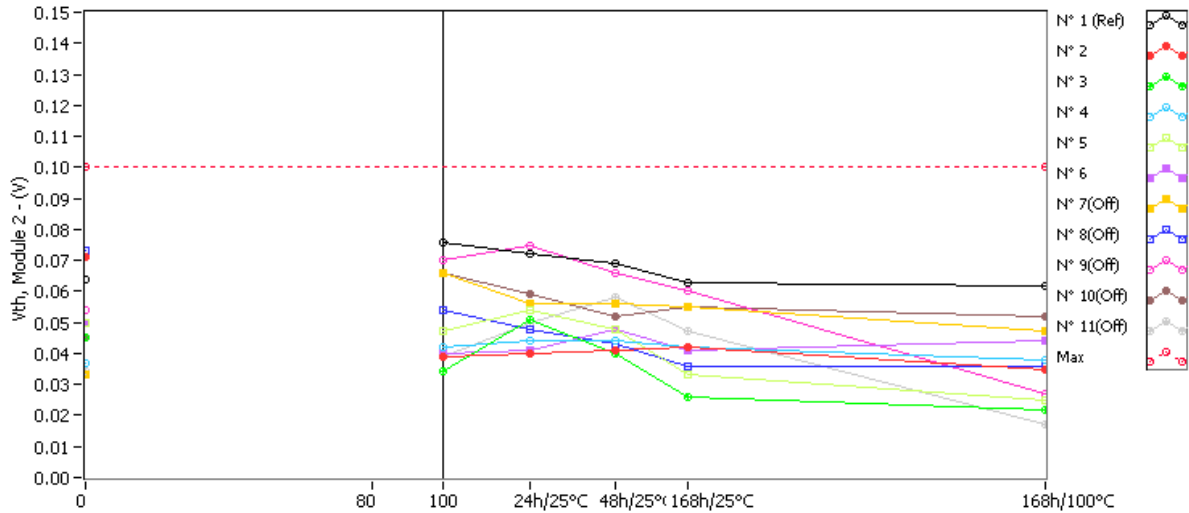
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.049	NaN	0.047	0.037	0.031	0.032	0.037
N° 2	0.043	NaN	0.045	0.044	0.046	0.042	0.043
N° 3	0.045	NaN	0.065	0.069	0.068	0.073	0.050
N° 4	0.086	NaN	0.089	0.090	0.075	0.070	0.065
N° 5	0.088	NaN	0.085	0.080	0.075	0.070	0.065
N° 6	0.085	NaN	0.080	0.085	0.075	0.070	0.060
N° 7(Off)	0.090	NaN	0.085	0.090	0.095	0.080	0.075
N° 8(Off)	0.083	NaN	0.085	0.081	0.078	0.075	0.070
N° 9(Off)	0.075	NaN	0.075	0.073	0.071	0.065	0.058
N° 10(Off)	0.055	NaN	0.059	0.065	0.053	0.052	0.045
N° 11(Off)	0.065	NaN	0.063	0.061	0.058	0.055	0.053

Delta [Vth, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-2.000E-3	-1.200E-2	-1.800E-2	-1.700E-2	-1.200E-2
N° 2	---	NaN	2.000E-3	1.000E-3	3.000E-3	-1.000E-3	0.000E+0
N° 3	---	NaN	2.000E-2	2.400E-2	2.300E-2	2.800E-2	5.000E-3
N° 4	---	NaN	3.000E-3	4.000E-3	-1.100E-2	-1.600E-2	-2.100E-2
N° 5	---	NaN	-3.000E-3	-8.000E-3	-1.300E-2	-1.800E-2	-2.300E-2
N° 6	---	NaN	-5.000E-3	0.000E+0	-1.000E-2	-1.500E-2	-2.500E-2
N° 7(Off)	---	NaN	-5.000E-3	0.000E+0	5.000E-3	-1.000E-2	-1.500E-2
N° 8(Off)	---	NaN	2.000E-3	-2.000E-3	-5.000E-3	-8.000E-3	-1.300E-2
N° 9(Off)	---	NaN	0.000E+0	-2.000E-3	-4.000E-3	-1.000E-2	-1.700E-2
N° 10(Off)	---	NaN	4.000E-3	1.000E-2	-2.000E-3	-3.000E-3	-1.000E-2
N° 11(Off)	---	NaN	-2.000E-3	-4.000E-3	-7.000E-3	-1.000E-2	-1.200E-2
Average	---	NaN	3.400E-3	4.200E-3	-1.600E-3	-4.400E-3	-1.280E-2
s	---	0.000E+0	9.864E-3	1.192E-2	1.513E-2	1.932E-2	1.415E-2
Average+3s	---	NaN	3.299E-2	3.997E-2	4.378E-2	5.356E-2	2.965E-2
Average-3s	---	NaN	-2.619E-2	-3.157E-2	-4.698E-2	-6.236E-2	-5.525E-2

26. Vth, Module 2

"Vcm = +1.2V"



Vth, Module 2 . (V)

Max = 0.1

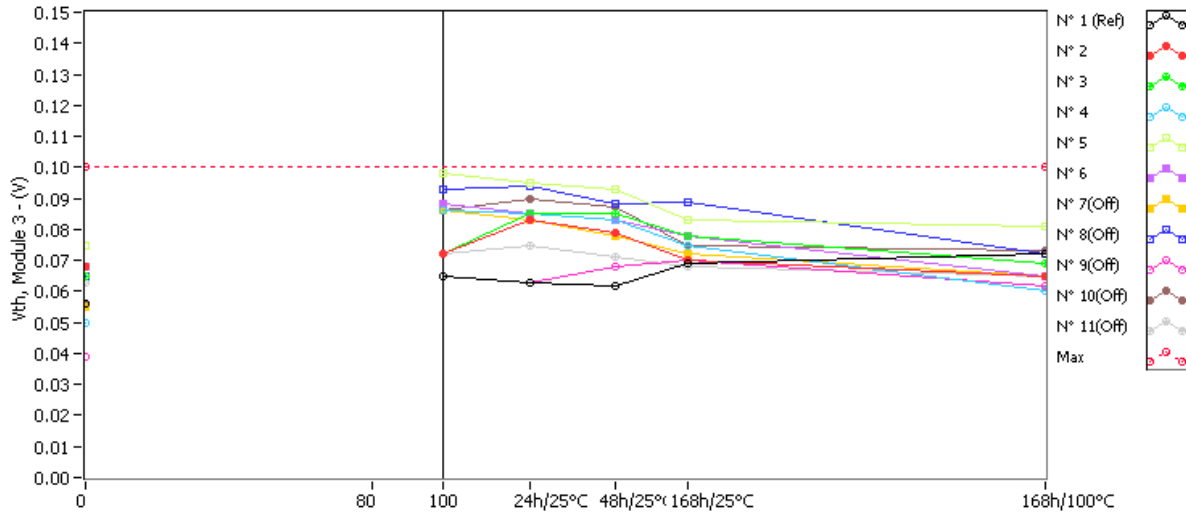
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.064	NaN	0.076	0.072	0.069	0.063	0.062
N° 2	0.071	NaN	0.039	0.040	0.041	0.042	0.035
N° 3	0.045	NaN	0.034	0.051	0.040	0.026	0.022
N° 4	0.037	NaN	0.042	0.044	0.044	0.042	0.038
N° 5	0.050	NaN	0.047	0.054	0.048	0.033	0.025
N° 6	0.050	NaN	0.040	0.041	0.048	0.041	0.044
N° 7(Off)	0.033	NaN	0.066	0.056	0.056	0.055	0.047
N° 8(Off)	0.073	NaN	0.054	0.048	0.043	0.036	0.036
N° 9(Off)	0.054	NaN	0.070	0.075	0.066	0.060	0.027
N° 10(Off)	0.045	NaN	0.066	0.059	0.052	0.055	0.052
N° 11(Off)	0.034	NaN	0.039	0.050	0.058	0.047	0.017

Delta [Vth, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	1.200E-2	8.000E-3	5.000E-3	-1.000E-3	-2.000E-3
N° 2	---	NaN	-3.200E-2	-3.100E-2	-3.000E-2	-2.900E-2	-3.600E-2
N° 3	---	NaN	-1.100E-2	6.000E-3	-5.000E-3	-1.900E-2	-2.300E-2
N° 4	---	NaN	5.000E-3	7.000E-3	7.000E-3	5.000E-3	1.000E-3
N° 5	---	NaN	-3.000E-3	4.000E-3	-2.000E-3	-1.700E-2	-2.500E-2
N° 6	---	NaN	-1.000E-2	-9.000E-3	-2.000E-3	-9.000E-3	-6.000E-3
N° 7(Off)	---	NaN	3.300E-2	2.300E-2	2.300E-2	2.200E-2	1.400E-2
N° 8(Off)	---	NaN	-1.900E-2	-2.500E-2	-3.000E-2	-3.700E-2	-3.700E-2
N° 9(Off)	---	NaN	1.600E-2	2.100E-2	1.200E-2	6.000E-3	-2.700E-2
N° 10(Off)	---	NaN	2.100E-2	1.400E-2	7.000E-3	1.000E-2	7.000E-3
N° 11(Off)	---	NaN	5.000E-3	1.600E-2	2.400E-2	1.300E-2	-1.700E-2
Average	---	NaN	-1.020E-2	-4.600E-3	-6.400E-3	-1.380E-2	-1.780E-2
s	---	0.000E+0	1.377E-2	1.610E-2	1.394E-2	1.270E-2	1.502E-2
Average+3s	---	NaN	3.112E-2	4.371E-2	3.542E-2	2.429E-2	2.727E-2
Average-3s	---	NaN	-5.152E-2	-5.291E-2	-4.822E-2	-5.189E-2	-6.287E-2

27. Vth, Module 3

"Vcm = +1.2V"



Vth, Module 3 . (V)

Max = 0.1

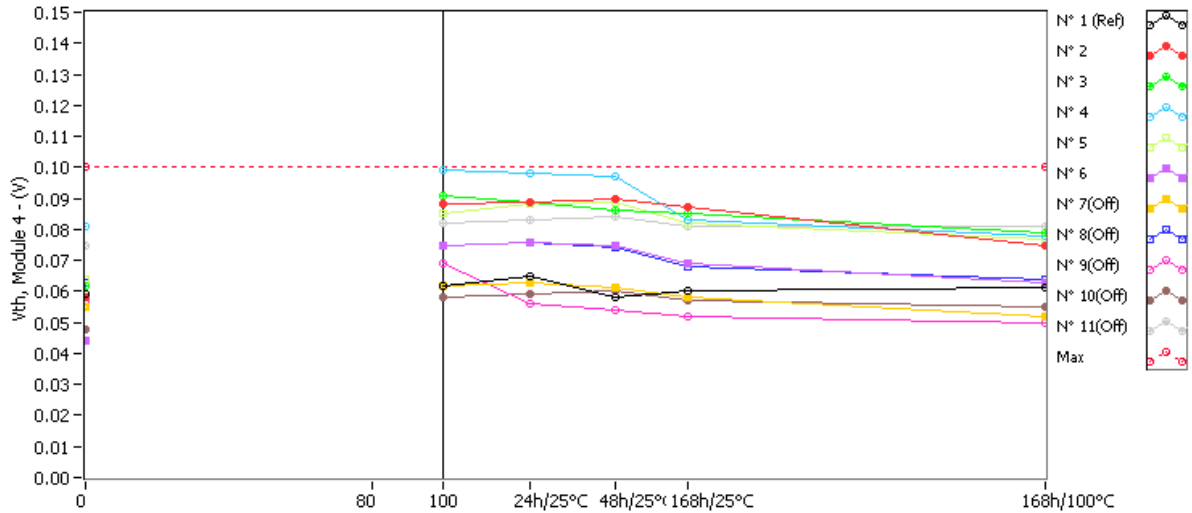
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.056	NaN	0.065	0.063	0.062	0.069	0.072
N° 2	0.068	NaN	0.072	0.083	0.079	0.070	0.065
N° 3	0.065	NaN	0.072	0.085	0.085	0.078	0.069
N° 4	0.050	NaN	0.086	0.085	0.083	0.075	0.060
N° 5	0.075	NaN	0.098	0.095	0.093	0.083	0.081
N° 6	0.068	NaN	0.088	0.085	0.083	0.078	0.065
N° 7(Off)	0.055	NaN	0.086	0.083	0.078	0.072	0.065
N° 8(Off)	0.065	NaN	0.093	0.094	0.088	0.089	0.072
N° 9(Off)	0.039	NaN	0.065	0.063	0.068	0.070	0.062
N° 10(Off)	0.056	NaN	0.086	0.090	0.087	0.075	0.073
N° 11(Off)	0.063	NaN	0.072	0.075	0.071	0.068	0.065

Delta [Vth, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	9.000E-3	7.000E-3	6.000E-3	1.300E-2	1.600E-2
N° 2	---	NaN	4.000E-3	1.500E-2	1.100E-2	2.000E-3	-3.000E-3
N° 3	---	NaN	7.000E-3	2.000E-2	2.000E-2	1.300E-2	4.000E-3
N° 4	---	NaN	3.600E-2	3.500E-2	3.300E-2	2.500E-2	1.000E-2
N° 5	---	NaN	2.300E-2	2.000E-2	1.800E-2	8.000E-3	6.000E-3
N° 6	---	NaN	2.000E-2	1.700E-2	1.500E-2	1.000E-2	-3.000E-3
N° 7(Off)	---	NaN	3.100E-2	2.800E-2	2.300E-2	1.700E-2	1.000E-2
N° 8(Off)	---	NaN	2.800E-2	2.900E-2	2.300E-2	2.400E-2	7.000E-3
N° 9(Off)	---	NaN	2.600E-2	2.400E-2	2.900E-2	3.100E-2	2.300E-2
N° 10(Off)	---	NaN	3.000E-2	3.400E-2	3.100E-2	1.900E-2	1.700E-2
N° 11(Off)	---	NaN	9.000E-3	1.200E-2	8.000E-3	5.000E-3	2.000E-3
Average	---	NaN	1.800E-2	2.140E-2	1.940E-2	1.160E-2	2.800E-3
s	---	0.000E+0	1.294E-2	7.893E-3	8.325E-3	8.503E-3	5.718E-3
Average+3s	---	NaN	5.683E-2	4.508E-2	4.437E-2	3.711E-2	1.996E-2
Average-3s	---	NaN	-2.083E-2	-2.279E-3	-5.574E-3	-1.391E-2	-1.436E-2

28. Vth, Module 4

"Vcm = +1.2V"



Vth, Module 4 . (V)

Max = 0.1

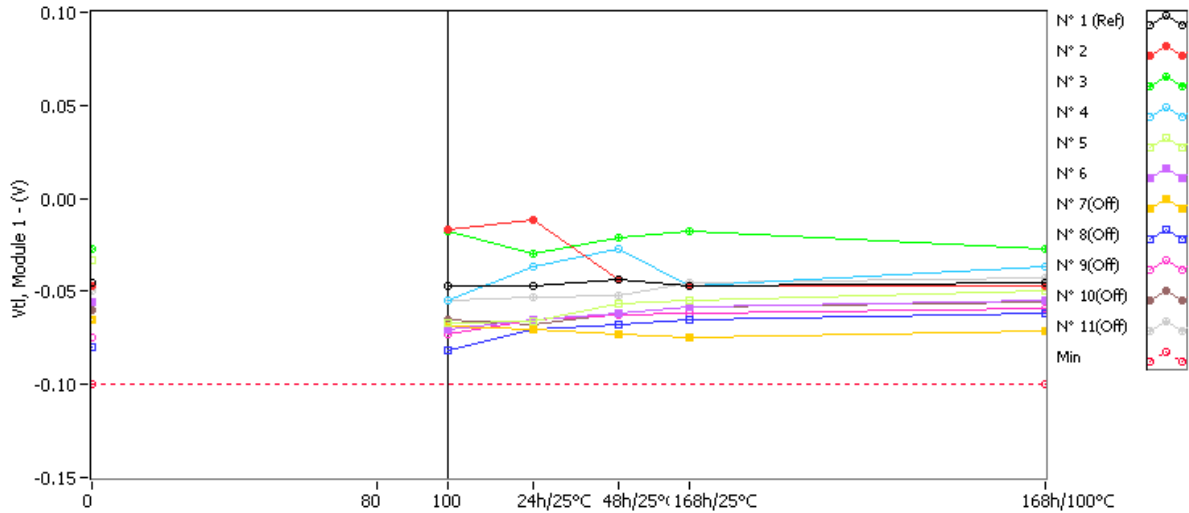
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.059	NaN	0.062	0.065	0.058	0.060	0.061
N° 2	0.058	NaN	0.088	0.089	0.090	0.087	0.075
N° 3	0.062	NaN	0.091	0.089	0.086	0.085	0.079
N° 4	0.081	NaN	0.099	0.098	0.097	0.083	0.078
N° 5	0.064	NaN	0.085	0.088	0.089	0.082	0.077
N° 6	0.044	NaN	0.075	0.076	0.075	0.069	0.063
N° 7(Off)	0.055	NaN	0.062	0.063	0.061	0.058	0.052
N° 8(Off)	0.063	NaN	0.075	0.076	0.074	0.068	0.064
N° 9(Off)	0.057	NaN	0.069	0.056	0.054	0.052	0.050
N° 10(Off)	0.048	NaN	0.058	0.059	0.060	0.057	0.055
N° 11(Off)	0.075	NaN	0.082	0.083	0.084	0.081	0.081

Delta [Vth, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	3.000E-3	6.000E-3	-1.000E-3	1.000E-3	2.000E-3
N° 2	---	NaN	3.000E-2	3.100E-2	3.200E-2	2.900E-2	1.700E-2
N° 3	---	NaN	2.900E-2	2.700E-2	2.400E-2	2.300E-2	1.700E-2
N° 4	---	NaN	1.800E-2	1.700E-2	1.600E-2	2.000E-3	-3.000E-3
N° 5	---	NaN	2.100E-2	2.400E-2	2.500E-2	1.800E-2	1.300E-2
N° 6	---	NaN	3.100E-2	3.200E-2	3.100E-2	2.500E-2	1.900E-2
N° 7(Off)	---	NaN	7.000E-3	8.000E-3	6.000E-3	3.000E-3	-3.000E-3
N° 8(Off)	---	NaN	1.200E-2	1.300E-2	1.100E-2	5.000E-3	1.000E-3
N° 9(Off)	---	NaN	1.200E-2	-1.000E-3	-3.000E-3	-5.000E-3	-7.000E-3
N° 10(Off)	---	NaN	1.000E-2	1.100E-2	1.200E-2	9.000E-3	7.000E-3
N° 11(Off)	---	NaN	7.000E-3	8.000E-3	9.000E-3	6.000E-3	6.000E-3
Average	---	NaN	2.580E-2	2.620E-2	2.560E-2	1.940E-2	1.260E-2
s	---	0.000E+0	5.891E-3	6.058E-3	6.427E-3	1.050E-2	8.989E-3
Average+3s	---	NaN	4.347E-2	4.437E-2	4.488E-2	5.091E-2	3.957E-2
Average-3s	---	NaN	8.128E-3	8.026E-3	6.320E-3	-1.211E-2	-1.437E-2

29. Vtl, Module 1

"Vcm = +1.2V"



Vtl, Module 1 . (V)

Min = -0.1

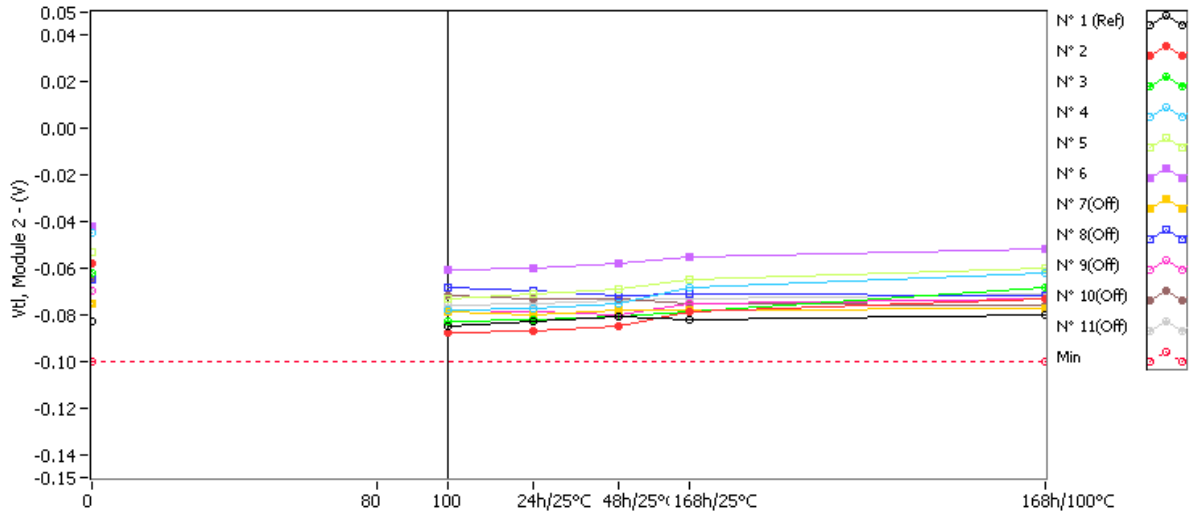
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-0.045	NaN	-0.047	-0.047	-0.044	-0.047	-0.045
N° 2	-0.047	NaN	-0.017	-0.012	-0.044	-0.047	-0.047
N° 3	-0.027	NaN	-0.018	-0.030	-0.021	-0.018	-0.027
N° 4	-0.047	NaN	-0.055	-0.037	-0.027	-0.047	-0.037
N° 5	-0.033	NaN	-0.067	-0.066	-0.057	-0.055	-0.050
N° 6	-0.056	NaN	-0.070	-0.065	-0.062	-0.058	-0.055
N° 7(Off)	-0.065	NaN	-0.069	-0.070	-0.073	-0.075	-0.071
N° 8(Off)	-0.080	NaN	-0.082	-0.070	-0.068	-0.065	-0.062
N° 9(Off)	-0.075	NaN	-0.073	-0.065	-0.063	-0.062	-0.059
N° 10(Off)	-0.060	NaN	-0.065	-0.068	-0.062	-0.058	-0.056
N° 11(Off)	-0.050	NaN	-0.055	-0.053	-0.052	-0.045	-0.043

Delta [Vtl, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-2.000E-3	-2.000E-3	1.000E-3	-2.000E-3	0.000E+0
N° 2	---	NaN	3.000E-2	3.500E-2	3.000E-3	0.000E+0	0.000E+0
N° 3	---	NaN	9.000E-3	-3.000E-3	6.000E-3	9.000E-3	0.000E+0
N° 4	---	NaN	-8.000E-3	1.000E-2	2.000E-2	0.000E+0	1.000E-2
N° 5	---	NaN	-3.400E-2	-3.300E-2	-2.400E-2	-2.200E-2	-1.700E-2
N° 6	---	NaN	-1.400E-2	-9.000E-3	-6.000E-3	-2.000E-3	1.000E-3
N° 7(Off)	---	NaN	-4.000E-3	-5.000E-3	-8.000E-3	-1.000E-2	-6.000E-3
N° 8(Off)	---	NaN	-2.000E-3	1.000E-2	1.200E-2	1.500E-2	1.800E-2
N° 9(Off)	---	NaN	2.000E-3	1.000E-2	1.200E-2	1.300E-2	1.600E-2
N° 10(Off)	---	NaN	-5.000E-3	-8.000E-3	-2.000E-3	2.000E-3	4.000E-3
N° 11(Off)	---	NaN	-5.000E-3	-3.000E-3	-2.000E-3	5.000E-3	7.000E-3
Average	---	NaN	-3.400E-3	6.939E-19	-2.000E-4	-3.000E-3	-1.200E-3
s	---	0.000E+0	2.418E-2	2.502E-2	1.625E-2	1.145E-2	9.783E-3
Average+3s	---	NaN	6.915E-2	7.506E-2	4.856E-2	3.134E-2	2.815E-2
Average-3s	---	NaN	-7.595E-2	-7.506E-2	-4.896E-2	-3.734E-2	-3.055E-2

30. Vtl, Module 2

"Vcm = +1.2V"



Vtl, Module 2 . (V)

Min = -0.1

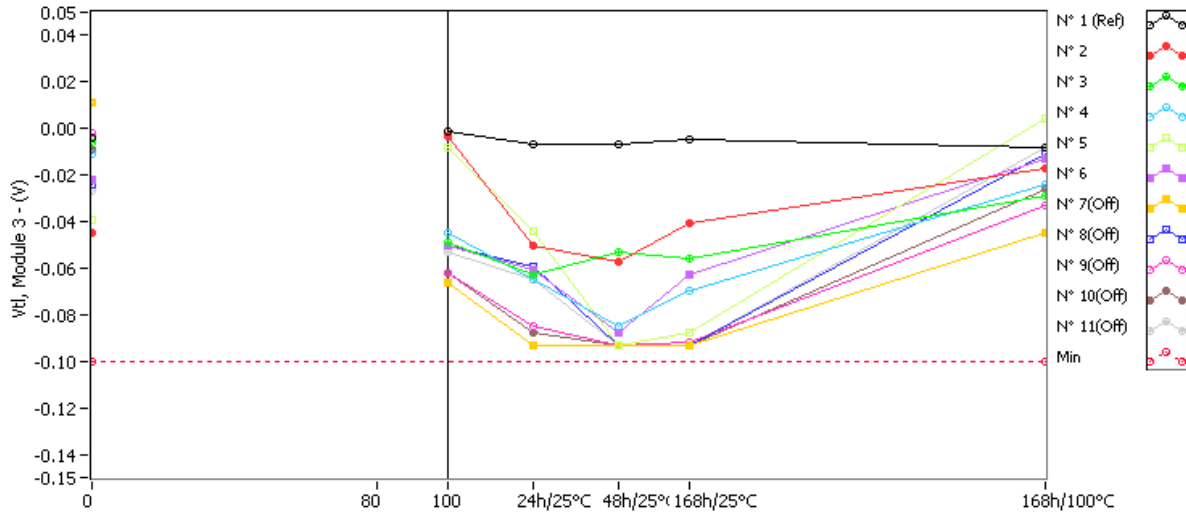
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-0.083	NaN	-0.085	-0.083	-0.081	-0.082	-0.080
N° 2	-0.058	NaN	-0.088	-0.087	-0.085	-0.079	-0.073
N° 3	-0.062	NaN	-0.083	-0.082	-0.081	-0.079	-0.068
N° 4	-0.045	NaN	-0.078	-0.077	-0.075	-0.068	-0.062
N° 5	-0.053	NaN	-0.073	-0.071	-0.069	-0.065	-0.060
N° 6	-0.042	NaN	-0.061	-0.060	-0.058	-0.055	-0.052
N° 7(Off)	-0.075	NaN	-0.079	-0.080	-0.078	-0.078	-0.077
N° 8(Off)	-0.065	NaN	-0.068	-0.070	-0.072	-0.071	-0.072
N° 9(Off)	-0.070	NaN	-0.078	-0.079	-0.080	-0.075	-0.073
N° 10(Off)	-0.065	NaN	-0.072	-0.073	-0.073	-0.075	-0.076
N° 11(Off)	-0.070	NaN	-0.076	-0.075	-0.074	-0.073	-0.071

Delta [Vtl, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-2.000E-3	0.000E+0	2.000E-3	1.000E-3	3.000E-3
N° 2	---	NaN	-3.000E-2	-2.900E-2	-2.700E-2	-2.100E-2	-1.500E-2
N° 3	---	NaN	-2.100E-2	-2.000E-2	-1.900E-2	-1.700E-2	-6.000E-3
N° 4	---	NaN	-3.300E-2	-3.200E-2	-3.000E-2	-2.300E-2	-1.700E-2
N° 5	---	NaN	-2.000E-2	-1.800E-2	-1.600E-2	-1.200E-2	-7.000E-3
N° 6	---	NaN	-1.900E-2	-1.800E-2	-1.600E-2	-1.300E-2	-1.000E-2
N° 7(Off)	---	NaN	-4.000E-3	-5.000E-3	-3.000E-3	-3.000E-3	-2.000E-3
N° 8(Off)	---	NaN	-3.000E-3	-5.000E-3	-7.000E-3	-6.000E-3	-7.000E-3
N° 9(Off)	---	NaN	-8.000E-3	-9.000E-3	-1.000E-2	-5.000E-3	-3.000E-3
N° 10(Off)	---	NaN	-7.000E-3	-8.000E-3	-8.000E-3	-1.000E-2	-1.100E-2
N° 11(Off)	---	NaN	-6.000E-3	-5.000E-3	-4.000E-3	-3.000E-3	-1.000E-3
Average	---	NaN	-2.460E-2	-2.340E-2	-2.160E-2	-1.720E-2	-1.100E-2
s	---	0.000E+0	6.427E-3	6.618E-3	6.504E-3	4.817E-3	4.848E-3
Average+3s	---	NaN	-5.320E-3	-3.546E-3	-2.088E-3	-2.750E-3	3.543E-3
Average-3s	---	NaN	-4.388E-2	-4.325E-2	-4.111E-2	-3.165E-2	-2.554E-2

31. Vtl, Module 3

"Vcm = +1.2V"



Vtl, Module 3 . (V)

Min = -0.1

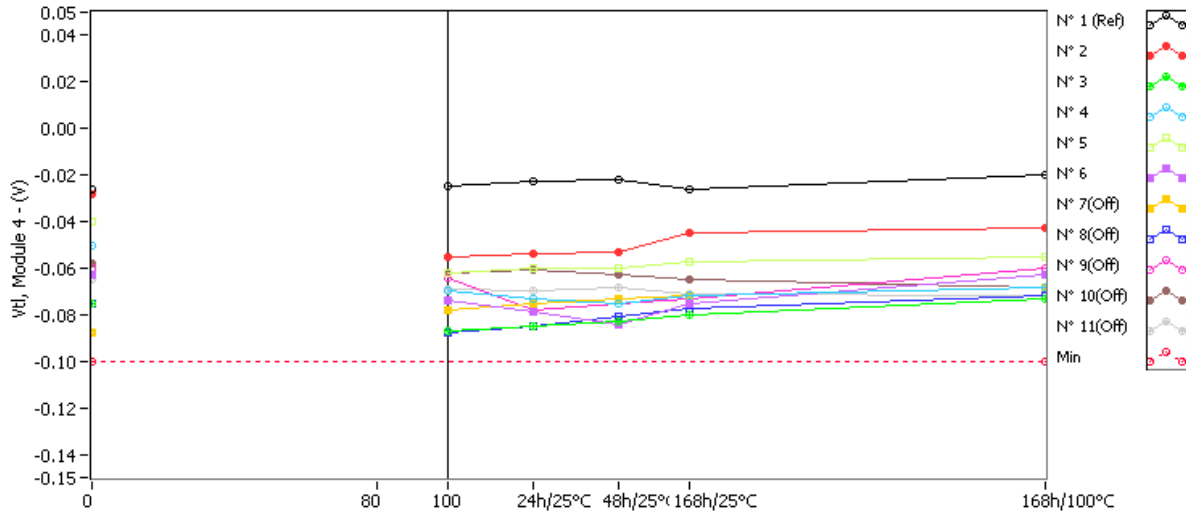
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-0.004	NaN	-0.001	-0.007	-0.007	-0.005	-0.008
N° 2	-0.045	NaN	-0.003	-0.050	-0.057	-0.041	-0.017
N° 3	-0.006	NaN	-0.049	-0.063	-0.053	-0.056	-0.029
N° 4	-0.011	NaN	-0.045	-0.065	-0.085	-0.070	-0.024
N° 5	-0.039	NaN	-0.008	-0.044	-0.093	-0.088	0.004
N° 6	-0.022	NaN	-0.050	-0.061	-0.088	-0.063	-0.013
N° 7(Off)	0.011	NaN	-0.066	-0.093	-0.093	-0.093	-0.045
N° 8(Off)	-0.024	NaN	-0.050	-0.059	-0.093	-0.093	-0.011
N° 9(Off)	-0.002	NaN	-0.062	-0.085	-0.093	-0.092	-0.033
N° 10(Off)	-0.009	NaN	-0.062	-0.088	-0.093	-0.093	-0.026
N° 11(Off)	-0.027	NaN	-0.053	-0.065	-0.093	-0.093	-0.008

Delta [Vtl, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	3.000E-3	-3.000E-3	-3.000E-3	-1.000E-3	-4.000E-3
N° 2	---	NaN	4.200E-2	-5.000E-3	-1.200E-2	4.000E-3	2.800E-2
N° 3	---	NaN	-4.300E-2	-5.700E-2	-4.700E-2	-5.000E-2	-2.300E-2
N° 4	---	NaN	-3.400E-2	-5.400E-2	-7.400E-2	-5.900E-2	-1.300E-2
N° 5	---	NaN	3.100E-2	-5.000E-3	-5.400E-2	-4.900E-2	4.300E-2
N° 6	---	NaN	-2.800E-2	-3.900E-2	-6.600E-2	-4.100E-2	9.000E-3
N° 7(Off)	---	NaN	-7.700E-2	-1.040E-1	-1.040E-1	-1.040E-1	-5.600E-2
N° 8(Off)	---	NaN	-2.600E-2	-3.500E-2	-6.900E-2	-6.900E-2	1.300E-2
N° 9(Off)	---	NaN	-6.000E-2	-8.300E-2	-9.100E-2	-9.000E-2	-3.100E-2
N° 10(Off)	---	NaN	-5.300E-2	-7.900E-2	-8.400E-2	-8.400E-2	-1.700E-2
N° 11(Off)	---	NaN	-2.600E-2	-3.800E-2	-6.600E-2	-6.600E-2	1.900E-2
Average	---	NaN	-6.400E-3	-3.200E-2	-5.060E-2	-3.900E-2	8.800E-3
s	---	0.000E+0	3.972E-2	2.557E-2	2.397E-2	2.487E-2	2.750E-2
Average+3s	---	NaN	1.127E-1	4.472E-2	2.132E-2	3.561E-2	9.130E-2
Average-3s	---	NaN	-1.255E-1	-1.087E-1	-1.225E-1	-1.136E-1	-7.370E-2

32. Vtl, Module 4

"Vcm = +1.2V"



Vtl, Module 4 . (V)

Min = -0.1

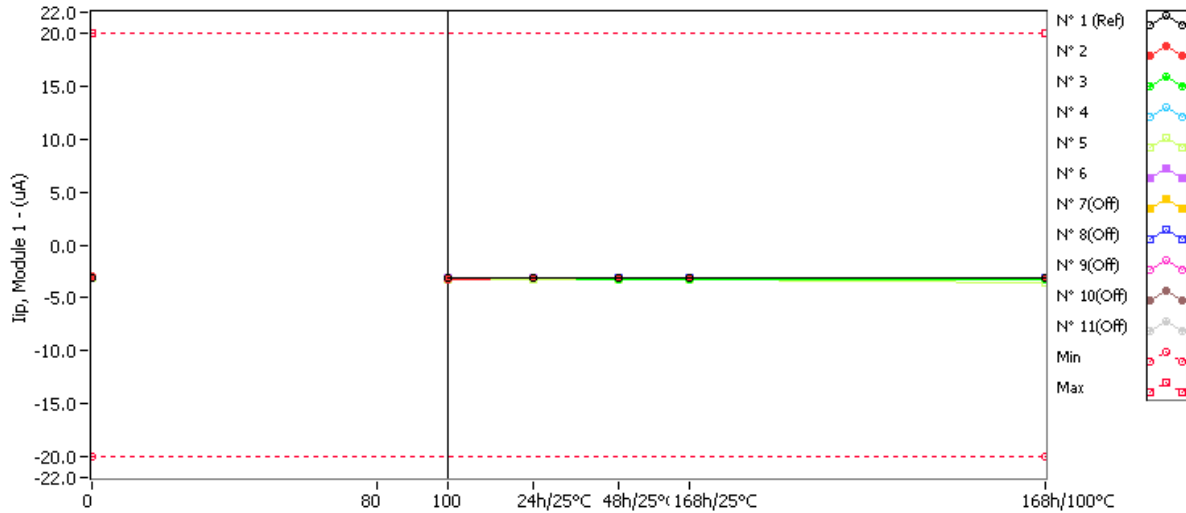
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-0.026	NaN	-0.025	-0.023	-0.022	-0.026	-0.020
N° 2	-0.028	NaN	-0.055	-0.054	-0.053	-0.045	-0.043
N° 3	-0.075	NaN	-0.087	-0.085	-0.083	-0.080	-0.073
N° 4	-0.050	NaN	-0.070	-0.073	-0.075	-0.072	-0.068
N° 5	-0.040	NaN	-0.062	-0.060	-0.060	-0.057	-0.055
N° 6	-0.063	NaN	-0.074	-0.079	-0.084	-0.075	-0.063
N° 7(Off)	-0.088	NaN	-0.078	-0.075	-0.073	-0.072	-0.068
N° 8(Off)	-0.075	NaN	-0.088	-0.085	-0.081	-0.077	-0.072
N° 9(Off)	-0.060	NaN	-0.064	-0.078	-0.075	-0.073	-0.060
N° 10(Off)	-0.058	NaN	-0.062	-0.061	-0.063	-0.065	-0.068
N° 11(Off)	-0.065	NaN	-0.069	-0.070	-0.068	-0.071	-0.072

Delta [Vtl, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	1.000E-3	3.000E-3	4.000E-3	0.000E+0	6.000E-3
N° 2	---	NaN	-2.700E-2	-2.600E-2	-2.500E-2	-1.700E-2	-1.500E-2
N° 3	---	NaN	-1.200E-2	-1.000E-2	-8.000E-3	-5.000E-3	2.000E-3
N° 4	---	NaN	-2.000E-2	-2.300E-2	-2.500E-2	-2.200E-2	-1.800E-2
N° 5	---	NaN	-2.200E-2	-2.000E-2	-2.000E-2	-1.700E-2	-1.500E-2
N° 6	---	NaN	-1.100E-2	-1.600E-2	-2.100E-2	-1.200E-2	0.000E+0
N° 7(Off)	---	NaN	1.000E-2	1.300E-2	1.500E-2	1.600E-2	2.000E-2
N° 8(Off)	---	NaN	-1.300E-2	-1.000E-2	-6.000E-3	-2.000E-3	3.000E-3
N° 9(Off)	---	NaN	-4.000E-3	-1.800E-2	-1.500E-2	-1.300E-2	0.000E+0
N° 10(Off)	---	NaN	-4.000E-3	-3.000E-3	-5.000E-3	-7.000E-3	-1.000E-2
N° 11(Off)	---	NaN	-4.000E-3	-5.000E-3	-3.000E-3	-6.000E-3	-7.000E-3
Average	---	NaN	-1.840E-2	-1.900E-2	-1.980E-2	-1.460E-2	-9.200E-3
s	---	0.000E+0	6.804E-3	6.245E-3	6.979E-3	6.427E-3	9.418E-3
Average+3s	---	NaN	2.013E-3	-2.650E-4	1.136E-3	4.680E-3	1.905E-2
Average-3s	---	NaN	-3.881E-2	-3.773E-2	-4.074E-2	-3.388E-2	-3.745E-2

33. Iip, Module 1

"Vin = 2.4V ; VCC = 3.6V ; receiver inputs"



Iip, Module 1 . (uA) Min = -20.0 Max = 20.0

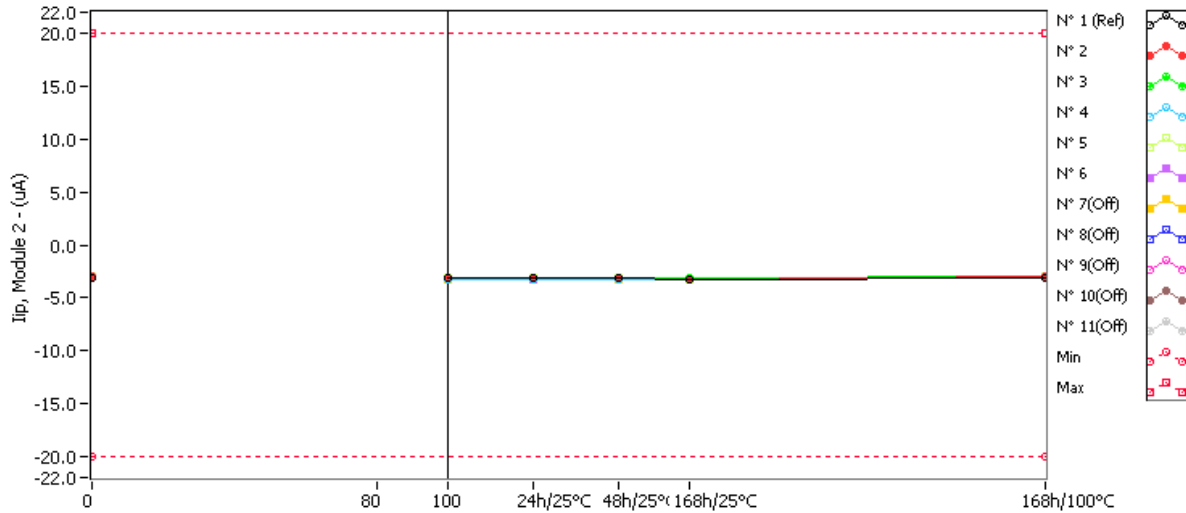
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-3.130000	NaN	-3.140000	-3.154000	-3.157000	-3.165000	-3.130000
N° 2	-3.040000	NaN	-3.200000	-3.056000	-3.059000	-3.080000	-3.070000
N° 3	-3.100000	NaN	-3.150000	-3.190000	-3.210000	-3.250000	-3.260000
N° 4	-3.110000	NaN	-3.160000	-3.180000	-3.198000	-3.205600	-3.210500
N° 5	-3.168900	NaN	-3.198700	-3.205000	-3.225000	-3.256000	-3.560000
N° 6	-3.120300	NaN	-3.156000	-3.168000	-3.198000	-3.205000	-3.220000
N° 7(Off)	-3.130000	NaN	-3.159000	-3.198000	-3.205000	-3.210900	-3.230500
N° 8(Off)	-3.140000	NaN	-3.160800	-3.178000	-3.160000	-3.158000	-3.189000
N° 9(Off)	-3.150200	NaN	-3.175000	-3.189000	-3.201500	-3.225000	-3.235000
N° 10(Off)	-3.165000	NaN	-3.186000	-3.198000	-3.216000	-3.221000	-3.235000
N° 11(Off)	-3.120000	NaN	-3.190000	-3.210600	-3.220600	-3.256000	-3.298000

Delta [Iip, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.000E-2	-2.400E-2	-2.700E-2	-3.500E-2	0.000E+0
N° 2	---	NaN	-1.600E-1	-1.600E-2	-1.900E-2	-4.000E-2	-3.000E-2
N° 3	---	NaN	-5.000E-2	-9.000E-2	-1.100E-1	-1.500E-1	-1.600E-1
N° 4	---	NaN	-5.000E-2	-7.000E-2	-8.800E-2	-9.560E-2	-1.005E-1
N° 5	---	NaN	-2.980E-2	-3.610E-2	-5.610E-2	-8.710E-2	-3.911E-1
N° 6	---	NaN	-3.570E-2	-4.770E-2	-7.770E-2	-8.470E-2	-9.970E-2
N° 7(Off)	---	NaN	-2.900E-2	-6.800E-2	-7.500E-2	-8.090E-2	-1.005E-1
N° 8(Off)	---	NaN	-2.080E-2	-3.800E-2	-2.000E-2	-1.800E-2	-4.900E-2
N° 9(Off)	---	NaN	-2.480E-2	-3.880E-2	-5.130E-2	-7.480E-2	-8.480E-2
N° 10(Off)	---	NaN	-2.100E-2	-3.300E-2	-5.100E-2	-5.600E-2	-7.000E-2
N° 11(Off)	---	NaN	-7.000E-2	-9.060E-2	-1.006E-1	-1.360E-1	-1.780E-1
Average	---	NaN	-6.510E-2	-5.196E-2	-7.016E-2	-9.148E-2	-1.563E-1
s	---	0.000E+0	5.379E-2	2.888E-2	3.456E-2	3.923E-2	1.391E-1
Average+3s	---	NaN	9.626E-2	3.467E-2	3.352E-2	2.622E-2	2.611E-1
Average-3s	---	NaN	-2.265E-1	-1.386E-1	-1.738E-1	-2.092E-1	-5.736E-1

34. Iip, Module 2

"Vin = 2.4V ; VCC = 3.6V ; receiver inputs"



Iip, Module 2 . (uA)

Min = -20.0 Max = 20.0

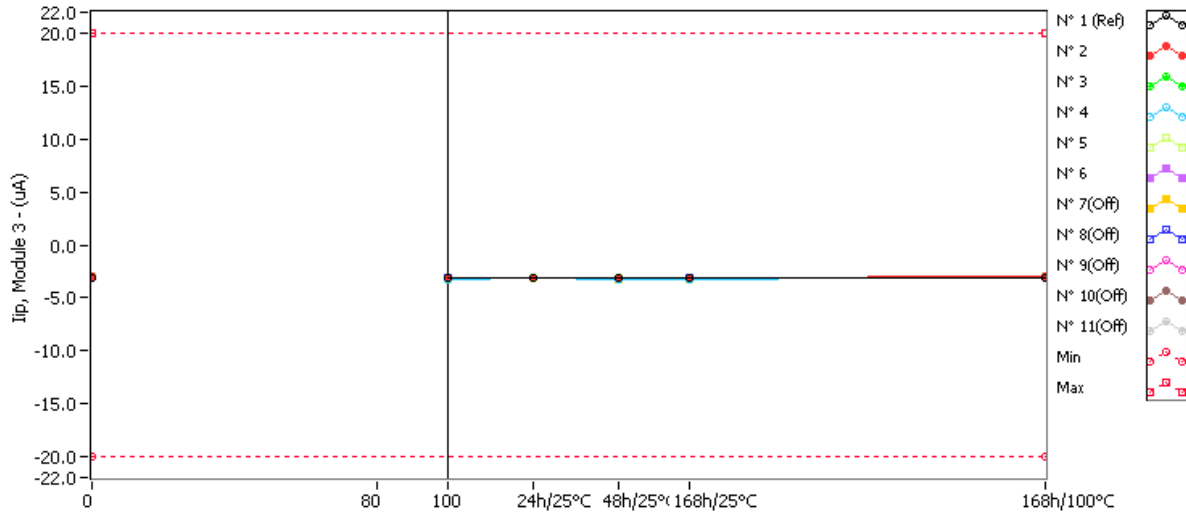
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-3.143	NaN	-3.181	-3.179	-3.167	-3.210	-3.143
N° 2	-3.014	NaN	-3.131	-3.162	-3.156	-3.199	-3.014
N° 3	-2.995	NaN	-3.140	-3.146	-3.145	-3.193	-2.995
N° 4	-3.063	NaN	-3.202	-3.204	-3.206	-3.262	-3.063
N° 5	-3.036	NaN	-3.186	-3.189	-3.178	-3.222	-3.036
N° 6	-3.041	NaN	-3.188	-3.198	-3.189	-3.232	-3.041
N° 7(Off)	-3.025	NaN	-3.244	-3.224	-3.215	-3.244	-3.025
N° 8(Off)	-3.012	NaN	-3.210	-3.195	-3.189	-3.211	-3.012
N° 9(Off)	-3.058	NaN	-3.261	-3.257	-3.248	-3.235	-3.058
N° 10(Off)	-3.059	NaN	-3.269	-3.250	-3.244	-3.223	-3.059
N° 11(Off)	-3.056	NaN	-3.263	-3.249	-3.244	-3.237	-3.056

Delta [Iip, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-3.800E-2	-3.600E-2	-2.400E-2	-6.700E-2	0.000E+0
N° 2	---	NaN	-1.170E-1	-1.480E-1	-1.420E-1	-1.850E-1	0.000E+0
N° 3	---	NaN	-1.450E-1	-1.510E-1	-1.500E-1	-1.980E-1	0.000E+0
N° 4	---	NaN	-1.390E-1	-1.410E-1	-1.430E-1	-1.990E-1	0.000E+0
N° 5	---	NaN	-1.500E-1	-1.530E-1	-1.420E-1	-1.860E-1	0.000E+0
N° 6	---	NaN	-1.470E-1	-1.570E-1	-1.480E-1	-1.910E-1	0.000E+0
N° 7(Off)	---	NaN	-2.190E-1	-1.990E-1	-1.900E-1	-2.190E-1	0.000E+0
N° 8(Off)	---	NaN	-1.980E-1	-1.830E-1	-1.770E-1	-1.990E-1	0.000E+0
N° 9(Off)	---	NaN	-2.030E-1	-1.990E-1	-1.900E-1	-1.770E-1	0.000E+0
N° 10(Off)	---	NaN	-2.100E-1	-1.910E-1	-1.850E-1	-1.640E-1	0.000E+0
N° 11(Off)	---	NaN	-2.070E-1	-1.930E-1	-1.880E-1	-1.810E-1	0.000E+0
Average	---	NaN	-1.396E-1	-1.500E-1	-1.450E-1	-1.918E-1	0.000E+0
s	---	0.000E+0	1.326E-2	6.000E-3	3.742E-3	6.535E-3	0.000E+0
Average+3s	---	NaN	-9.982E-2	-1.320E-1	-1.338E-1	-1.722E-1	0.000E+0
Average-3s	---	NaN	-1.794E-1	-1.680E-1	-1.562E-1	-2.114E-1	0.000E+0

35. Iip, Module 3

"Vin = 2.4V ; VCC = 3.6V ; receiver inputs"



Iip, Module 3 . (uA)

Min = -20.0 Max = 20.0

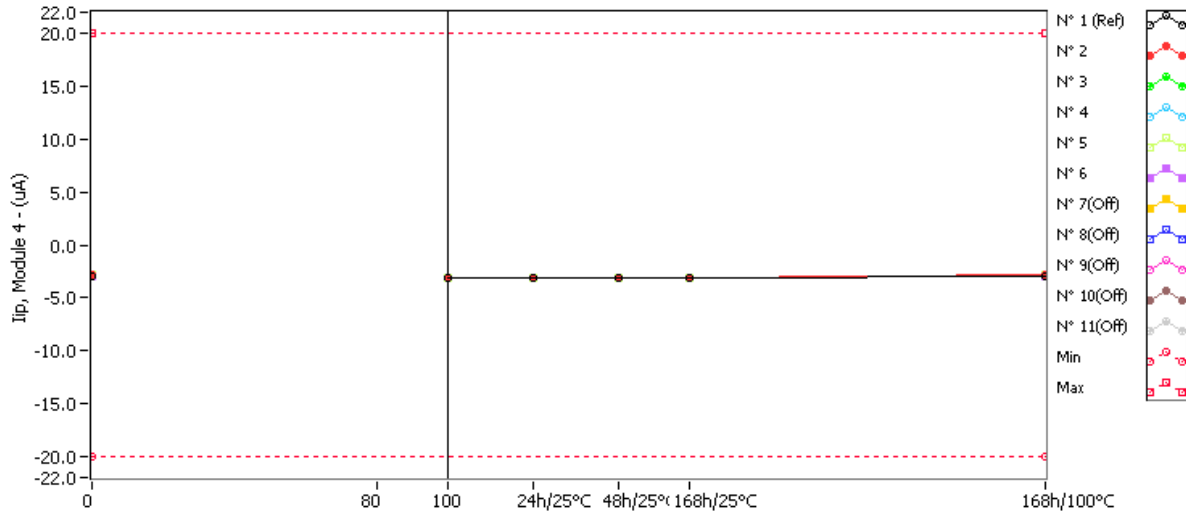
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-3.093	NaN	-3.136	-3.120	-3.118	-3.185	-3.093
N° 2	-2.968	NaN	-3.163	-3.128	-3.157	-3.178	-2.968
N° 3	-2.980	NaN	-3.180	-3.139	-3.166	-3.193	-2.980
N° 4	-3.008	NaN	-3.223	-3.177	-3.207	-3.253	-3.008
N° 5	-3.019	NaN	-3.221	-3.184	-3.173	-3.222	-3.019
N° 6	-2.990	NaN	-3.206	-3.152	-3.182	-3.201	-2.990
N° 7(Off)	-2.999	NaN	-3.236	-3.179	-3.203	-3.224	-2.999
N° 8(Off)	-2.968	NaN	-3.187	-3.137	-3.151	-3.191	-2.968
N° 9(Off)	-2.987	NaN	-3.221	-3.177	-3.197	-3.170	-2.987
N° 10(Off)	-2.981	NaN	-3.208	-3.137	-3.172	-3.144	-2.981
N° 11(Off)	-2.972	NaN	-3.219	-3.174	-3.186	-3.175	-2.972

Delta [Iip, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-4.300E-2	-2.700E-2	-2.500E-2	-9.200E-2	0.000E+0
N° 2	---	NaN	-1.950E-1	-1.600E-1	-1.890E-1	-2.100E-1	0.000E+0
N° 3	---	NaN	-2.000E-1	-1.590E-1	-1.860E-1	-2.130E-1	0.000E+0
N° 4	---	NaN	-2.150E-1	-1.690E-1	-1.990E-1	-2.450E-1	0.000E+0
N° 5	---	NaN	-2.020E-1	-1.650E-1	-1.540E-1	-2.030E-1	0.000E+0
N° 6	---	NaN	-2.160E-1	-1.620E-1	-1.920E-1	-2.110E-1	0.000E+0
N° 7(Off)	---	NaN	-2.370E-1	-1.800E-1	-2.040E-1	-2.250E-1	0.000E+0
N° 8(Off)	---	NaN	-2.190E-1	-1.690E-1	-1.830E-1	-2.230E-1	0.000E+0
N° 9(Off)	---	NaN	-2.340E-1	-1.900E-1	-2.100E-1	-1.830E-1	0.000E+0
N° 10(Off)	---	NaN	-2.270E-1	-1.560E-1	-1.910E-1	-1.630E-1	0.000E+0
N° 11(Off)	---	NaN	-2.470E-1	-2.020E-1	-2.140E-1	-2.030E-1	0.000E+0
Average	---	NaN	-2.056E-1	-1.630E-1	-1.840E-1	-2.164E-1	0.000E+0
s	---	0.000E+0	9.397E-3	4.062E-3	1.745E-2	1.643E-2	0.000E+0
Average+3s	---	NaN	-1.774E-1	-1.508E-1	-1.317E-1	-1.671E-1	0.000E+0
Average-3s	---	NaN	-2.338E-1	-1.752E-1	-2.363E-1	-2.657E-1	0.000E+0

36. Iip, Module 4

"Vin = 2.4V ; VCC = 3.6V ; receiver inputs"



Iip, Module 4 . (uA)

Min = -20.0 Max = 20.0

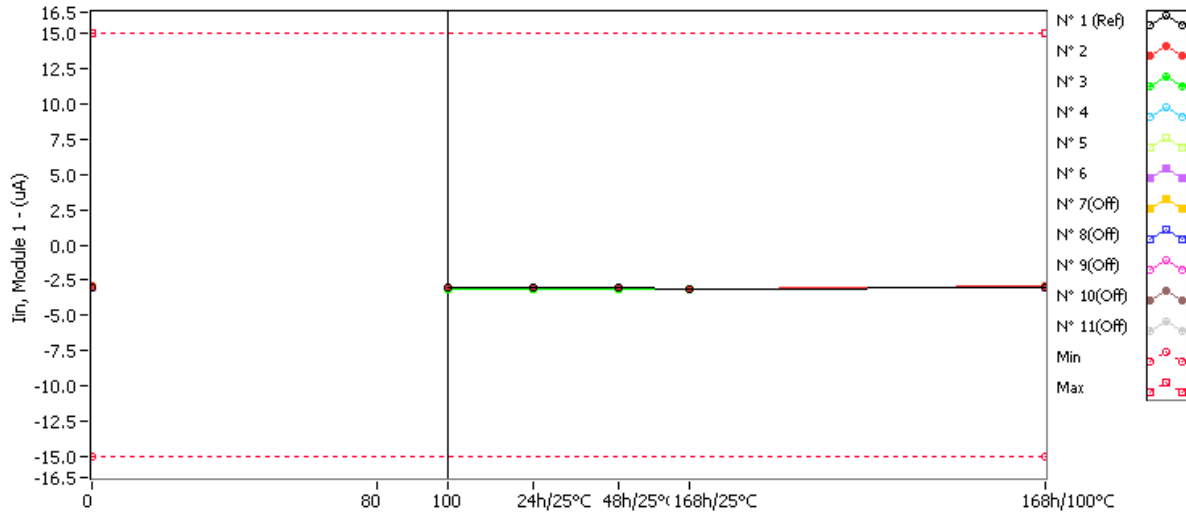
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-3.017	NaN	-3.052	-3.064	-3.076	-3.099	-3.017
N° 2	-2.883	NaN	-3.080	-3.102	-3.121	-3.125	-2.883
N° 3	-2.912	NaN	-3.118	-3.107	-3.110	-3.136	-2.912
N° 4	-2.968	NaN	-3.179	-3.141	-3.153	-3.182	-2.968
N° 5	-2.877	NaN	-3.116	-3.082	-3.111	-3.140	-2.877
N° 6	-2.917	NaN	-3.149	-3.153	-3.169	-3.182	-2.917
N° 7(Off)	-2.948	NaN	-3.175	-3.169	-3.158	-3.178	-2.948
N° 8(Off)	-2.858	NaN	-3.096	-3.054	-3.095	-3.108	-2.858
N° 9(Off)	-2.940	NaN	-3.151	-3.154	-3.170	-3.130	-2.940
N° 10(Off)	-2.933	NaN	-3.148	-3.116	-3.139	-3.112	-2.933
N° 11(Off)	-2.910	NaN	-3.161	-3.154	-3.184	-3.158	-2.910

Delta [Iip, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-3.500E-2	-4.700E-2	-5.900E-2	-8.200E-2	0.000E+0
N° 2	---	NaN	-1.970E-1	-2.190E-1	-2.380E-1	-2.420E-1	0.000E+0
N° 3	---	NaN	-2.060E-1	-1.950E-1	-1.980E-1	-2.240E-1	0.000E+0
N° 4	---	NaN	-2.110E-1	-1.730E-1	-1.850E-1	-2.140E-1	0.000E+0
N° 5	---	NaN	-2.390E-1	-2.050E-1	-2.340E-1	-2.630E-1	0.000E+0
N° 6	---	NaN	-2.320E-1	-2.360E-1	-2.520E-1	-2.650E-1	0.000E+0
N° 7(Off)	---	NaN	-2.270E-1	-2.210E-1	-2.100E-1	-2.300E-1	0.000E+0
N° 8(Off)	---	NaN	-2.380E-1	-1.960E-1	-2.370E-1	-2.500E-1	0.000E+0
N° 9(Off)	---	NaN	-2.110E-1	-2.140E-1	-2.300E-1	-1.900E-1	0.000E+0
N° 10(Off)	---	NaN	-2.150E-1	-1.830E-1	-2.060E-1	-1.790E-1	0.000E+0
N° 11(Off)	---	NaN	-2.510E-1	-2.440E-1	-2.740E-1	-2.480E-1	0.000E+0
Average	---	NaN	-2.170E-1	-2.056E-1	-2.214E-1	-2.416E-1	0.000E+0
s	---	0.000E+0	1.779E-2	2.387E-2	2.847E-2	2.279E-2	0.000E+0
Average+3s	---	NaN	-1.636E-1	-1.340E-1	-1.360E-1	-1.732E-1	0.000E+0
Average-3s	---	NaN	-2.704E-1	-2.772E-1	-3.068E-1	-3.100E-1	0.000E+0

37. Iin, Module 1

"VCC = 0 ; Vin = 3.6V ; all inputs"



Iin, Module 1 . (uA)

Min = -15.0 Max = 15.0

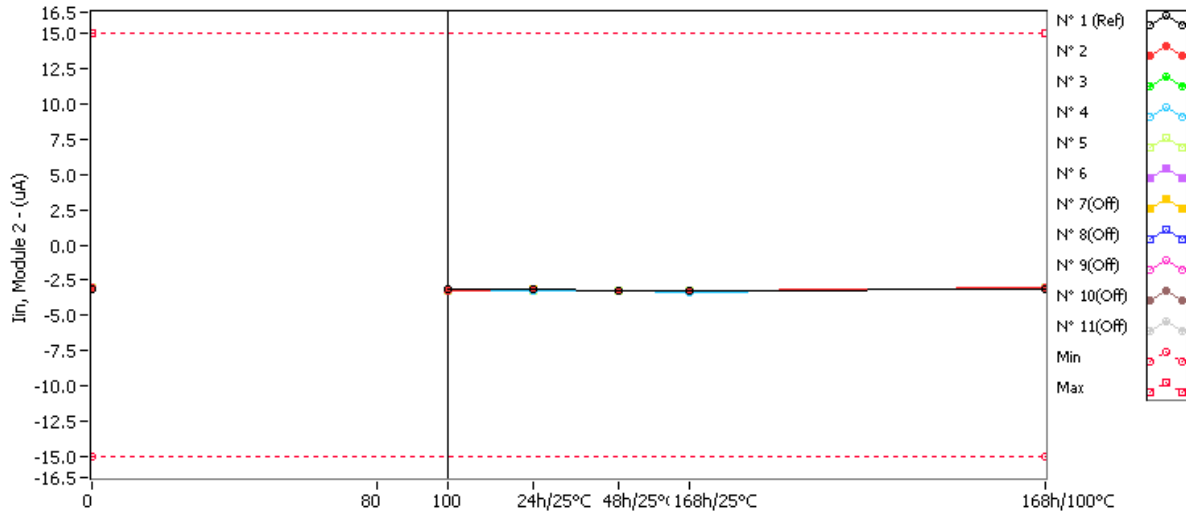
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-3.034	NaN	-3.081	-3.068	-3.069	-3.105	-3.034
N° 2	-2.934	NaN	-3.026	-3.048	-3.055	-3.101	-2.934
N° 3	-2.972	NaN	-3.086	-3.104	-3.102	-3.155	-2.972
N° 4	-2.971	NaN	-3.088	-3.093	-3.101	-3.155	-2.971
N° 5	-2.967	NaN	-3.100	-3.102	-3.097	-3.140	-2.967
N° 6	-2.974	NaN	-3.102	-3.105	-3.104	-3.149	-2.974
N° 7(Off)	-2.916	NaN	-3.135	-3.103	-3.106	-3.134	-2.916
N° 8(Off)	-2.909	NaN	-3.109	-3.084	-3.086	-3.108	-2.909
N° 9(Off)	-2.956	NaN	-3.160	-3.152	-3.143	-3.130	-2.956
N° 10(Off)	-2.948	NaN	-3.153	-3.123	-3.127	-3.109	-2.948
N° 11(Off)	-2.974	NaN	-3.179	-3.160	-3.160	-3.149	-2.974

Delta [Iin, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-4.700E-2	-3.400E-2	-3.500E-2	-7.100E-2	0.000E+0
N° 2	---	NaN	-9.200E-2	-1.140E-1	-1.210E-1	-1.670E-1	0.000E+0
N° 3	---	NaN	-1.140E-1	-1.320E-1	-1.300E-1	-1.830E-1	0.000E+0
N° 4	---	NaN	-1.170E-1	-1.220E-1	-1.300E-1	-1.840E-1	0.000E+0
N° 5	---	NaN	-1.330E-1	-1.350E-1	-1.300E-1	-1.730E-1	0.000E+0
N° 6	---	NaN	-1.280E-1	-1.310E-1	-1.300E-1	-1.750E-1	0.000E+0
N° 7(Off)	---	NaN	-2.190E-1	-1.870E-1	-1.900E-1	-2.180E-1	0.000E+0
N° 8(Off)	---	NaN	-2.000E-1	-1.750E-1	-1.770E-1	-1.990E-1	0.000E+0
N° 9(Off)	---	NaN	-2.040E-1	-1.960E-1	-1.870E-1	-1.740E-1	0.000E+0
N° 10(Off)	---	NaN	-2.050E-1	-1.750E-1	-1.790E-1	-1.610E-1	0.000E+0
N° 11(Off)	---	NaN	-2.050E-1	-1.860E-1	-1.860E-1	-1.750E-1	0.000E+0
Average	---	NaN	-1.168E-1	-1.268E-1	-1.282E-1	-1.764E-1	0.000E+0
s	---	0.000E+0	1.590E-2	8.643E-3	4.025E-3	7.127E-3	0.000E+0
Average+3s	---	NaN	-6.911E-2	-1.009E-1	-1.161E-1	-1.550E-1	0.000E+0
Average-3s	---	NaN	-1.645E-1	-1.527E-1	-1.403E-1	-1.978E-1	0.000E+0

38. Iin, Module 2

"VCC = 0 ; Vin = 3.6V ; all inputs"



Iin, Module 2 . (uA)

Min = -15.0 Max = 15.0

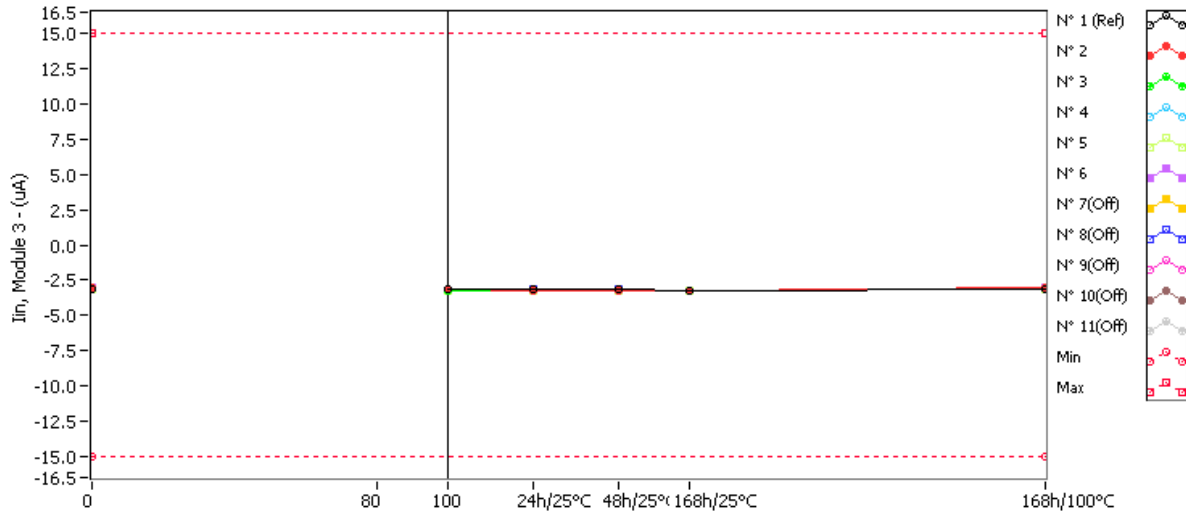
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-3.151	NaN	-3.193	-3.151	-3.222	-3.247	-3.151
N° 2	-3.005	NaN	-3.218	-3.134	-3.250	-3.262	-3.005
N° 3	-3.001	NaN	-3.209	-3.165	-3.240	-3.272	-3.001
N° 4	-3.044	NaN	-3.293	-3.230	-3.294	-3.318	-3.044
N° 5	-3.034	NaN	-3.250	-3.211	-3.226	-3.300	-3.034
N° 6	-3.046	NaN	-3.261	-3.212	-3.278	-3.300	-3.046
N° 7(Off)	-3.024	NaN	-3.272	-3.180	-3.246	-3.281	-3.024
N° 8(Off)	-2.984	NaN	-3.198	-3.147	-3.234	-3.249	-2.984
N° 9(Off)	-3.033	NaN	-3.260	-3.211	-3.278	-3.235	-3.033
N° 10(Off)	-3.015	NaN	-3.247	-3.167	-3.282	-3.223	-3.015
N° 11(Off)	-3.023	NaN	-3.282	-3.234	-3.300	-3.270	-3.023

Delta [Iin, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-4.200E-2	0.000E+0	-7.100E-2	-9.600E-2	0.000E+0
N° 2	---	NaN	-2.130E-1	-1.290E-1	-2.450E-1	-2.570E-1	0.000E+0
N° 3	---	NaN	-2.080E-1	-1.640E-1	-2.390E-1	-2.710E-1	0.000E+0
N° 4	---	NaN	-2.490E-1	-1.860E-1	-2.500E-1	-2.740E-1	0.000E+0
N° 5	---	NaN	-2.160E-1	-1.770E-1	-1.920E-1	-2.660E-1	0.000E+0
N° 6	---	NaN	-2.150E-1	-1.660E-1	-2.320E-1	-2.540E-1	0.000E+0
N° 7(Off)	---	NaN	-2.480E-1	-1.560E-1	-2.220E-1	-2.570E-1	0.000E+0
N° 8(Off)	---	NaN	-2.140E-1	-1.630E-1	-2.500E-1	-2.650E-1	0.000E+0
N° 9(Off)	---	NaN	-2.270E-1	-1.780E-1	-2.450E-1	-2.020E-1	0.000E+0
N° 10(Off)	---	NaN	-2.320E-1	-1.520E-1	-2.670E-1	-2.080E-1	0.000E+0
N° 11(Off)	---	NaN	-2.590E-1	-2.110E-1	-2.770E-1	-2.470E-1	0.000E+0
Average	---	NaN	-2.202E-1	-1.644E-1	-2.316E-1	-2.644E-1	0.000E+0
s	---	0.000E+0	1.639E-2	2.169E-2	2.314E-2	8.678E-3	0.000E+0
Average+3s	---	NaN	-1.710E-1	-9.934E-2	-1.622E-1	-2.384E-1	0.000E+0
Average-3s	---	NaN	-2.694E-1	-2.295E-1	-3.010E-1	-2.904E-1	0.000E+0

39. Iin, Module 3

"VCC = 0 ; Vin = 3.6V ; all inputs"



Iin, Module 3 . (uA)

Min = -15.0 Max = 15.0

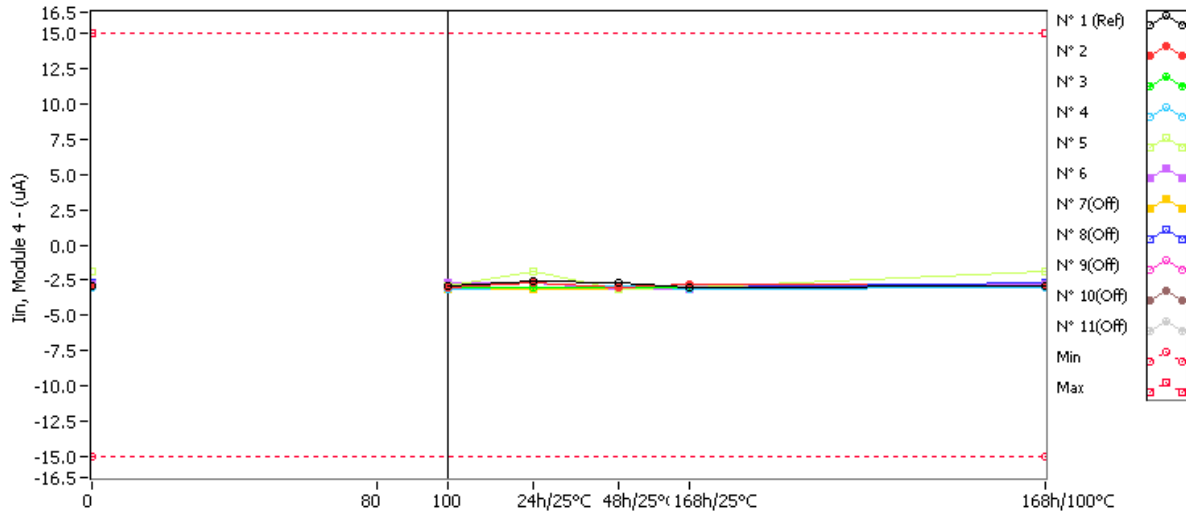
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-3.155	NaN	-3.164	-3.177	-3.193	-3.227	-3.155
N° 2	-3.047	NaN	-3.189	-3.199	-3.230	-3.242	-3.047
N° 3	-3.070	NaN	-3.207	-3.224	-3.230	-3.251	-3.070
N° 4	-3.098	NaN	-3.265	-3.250	-3.284	-3.310	-3.098
N° 5	-3.088	NaN	-3.262	-3.258	-3.265	-3.257	-3.088
N° 6	-3.069	NaN	-3.236	-3.225	-3.215	-3.267	-3.069
N° 7(Off)	-3.073	NaN	-3.265	-3.247	-3.275	-3.293	-3.073
N° 8(Off)	-3.028	NaN	-3.222	-3.195	-3.192	-3.201	-3.028
N° 9(Off)	-3.044	NaN	-3.233	-3.232	-3.246	-3.203	-3.044
N° 10(Off)	-3.043	NaN	-3.223	-3.198	-3.242	-3.206	-3.043
N° 11(Off)	-3.041	NaN	-3.240	-3.239	-3.255	-3.235	-3.041

Delta [Iin, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-9.000E-3	-2.200E-2	-3.800E-2	-7.200E-2	0.000E+0
N° 2	---	NaN	-1.420E-1	-1.520E-1	-1.830E-1	-1.950E-1	0.000E+0
N° 3	---	NaN	-1.370E-1	-1.540E-1	-1.600E-1	-1.810E-1	0.000E+0
N° 4	---	NaN	-1.670E-1	-1.520E-1	-1.860E-1	-2.120E-1	0.000E+0
N° 5	---	NaN	-1.740E-1	-1.700E-1	-1.770E-1	-1.690E-1	0.000E+0
N° 6	---	NaN	-1.670E-1	-1.560E-1	-1.460E-1	-1.980E-1	0.000E+0
N° 7(Off)	---	NaN	-1.920E-1	-1.740E-1	-2.020E-1	-2.200E-1	0.000E+0
N° 8(Off)	---	NaN	-1.940E-1	-1.670E-1	-1.640E-1	-1.730E-1	0.000E+0
N° 9(Off)	---	NaN	-1.890E-1	-1.880E-1	-2.020E-1	-1.590E-1	0.000E+0
N° 10(Off)	---	NaN	-1.800E-1	-1.550E-1	-1.990E-1	-1.630E-1	0.000E+0
N° 11(Off)	---	NaN	-1.990E-1	-1.980E-1	-2.140E-1	-1.940E-1	0.000E+0
Average	---	NaN	-1.574E-1	-1.568E-1	-1.704E-1	-1.910E-1	0.000E+0
s	---	0.000E+0	1.668E-2	7.563E-3	1.695E-2	1.651E-2	0.000E+0
Average+3s	---	NaN	-1.074E-1	-1.341E-1	-1.196E-1	-1.415E-1	0.000E+0
Average-3s	---	NaN	-2.074E-1	-1.795E-1	-2.212E-1	-2.405E-1	0.000E+0

40. Iin, Module 4

"VCC = 0 ; Vin = 3.6V ; all inputs"



Iin, Module 4 . (uA)

Min = -15.0 Max = 15.0

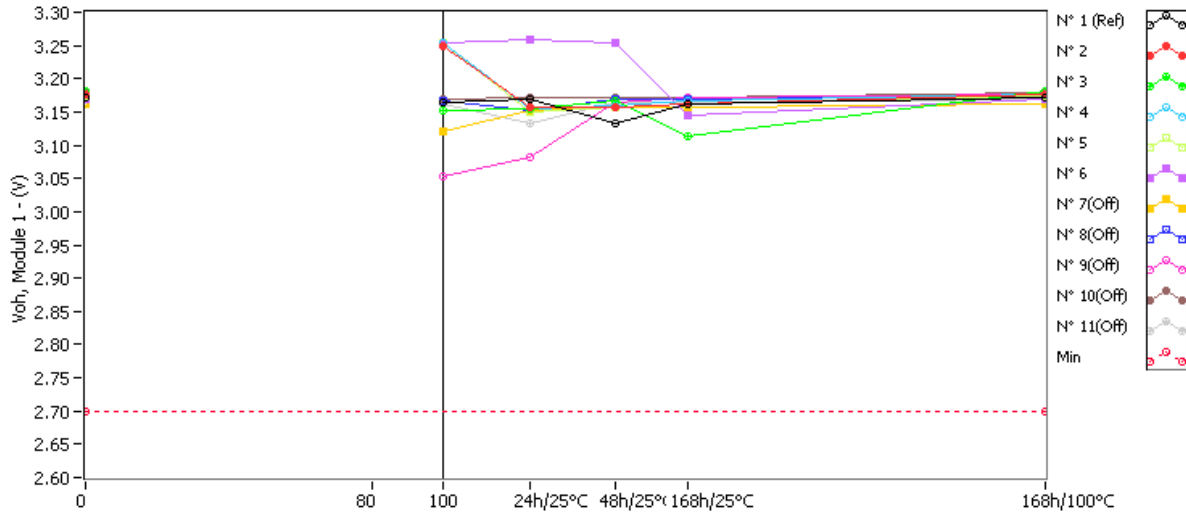
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	-2.949	NaN	-2.945	-2.516	-2.680	-2.973	-2.949
N° 2	-2.885	NaN	-2.978	-2.735	-3.052	-2.797	-2.885
N° 3	-2.906	NaN	-3.059	-3.015	-3.074	-3.050	-2.906
N° 4	-2.987	NaN	-3.101	-2.973	-2.904	-3.107	-2.987
N° 5	-1.925	NaN	-2.875	-1.936	-3.087	-3.065	-1.925
N° 6	-2.788	NaN	-2.704	-2.735	-3.103	-3.111	-2.788
N° 7(Off)	-2.944	NaN	-3.103	-3.132	-3.088	-3.107	-2.944
N° 8(Off)	-2.729	NaN	-3.023	-2.981	-2.996	-3.022	-2.729
N° 9(Off)	-2.956	NaN	-3.095	-3.097	-3.100	-3.084	-2.956
N° 10(Off)	-2.931	NaN	-3.066	-3.011	-3.043	-3.021	-2.931
N° 11(Off)	-2.959	NaN	-3.089	-3.098	-2.923	-2.863	-2.959

Delta [Iin, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	4.000E-3	4.330E-1	2.690E-1	-2.400E-2	0.000E+0
N° 2	---	NaN	-9.300E-2	1.500E-1	-1.670E-1	8.800E-2	0.000E+0
N° 3	---	NaN	-1.530E-1	-1.090E-1	-1.680E-1	-1.440E-1	0.000E+0
N° 4	---	NaN	-1.140E-1	1.400E-2	8.300E-2	-1.200E-1	0.000E+0
N° 5	---	NaN	-9.500E-1	-1.100E-2	-1.162E+0	-1.140E+0	0.000E+0
N° 6	---	NaN	8.400E-2	5.300E-2	-3.150E-1	-3.230E-1	0.000E+0
N° 7(Off)	---	NaN	-1.590E-1	-1.880E-1	-1.440E-1	-1.630E-1	0.000E+0
N° 8(Off)	---	NaN	-2.940E-1	-2.520E-1	-2.670E-1	-2.930E-1	0.000E+0
N° 9(Off)	---	NaN	-1.390E-1	-1.410E-1	-1.440E-1	-1.280E-1	0.000E+0
N° 10(Off)	---	NaN	-1.350E-1	-8.000E-2	-1.120E-1	-9.000E-2	0.000E+0
N° 11(Off)	---	NaN	-1.300E-1	-1.390E-1	3.600E-2	9.600E-2	0.000E+0
Average	---	NaN	-2.452E-1	1.940E-2	-3.458E-1	-3.278E-1	0.000E+0
s	---	0.000E+0	4.043E-1	9.437E-2	4.782E-1	4.769E-1	0.000E+0
Average+3s	---	NaN	9.678E-1	3.025E-1	1.089E+0	1.103E+0	0.000E+0
Average-3s	---	NaN	-1.458E+0	-2.637E-1	-1.780E+0	-1.758E+0	0.000E+0

41. Voh, Module 1

"Ioh = -0.4mA ; Vcc = 3V"



Voh, Module 1 . (V)

Min = 2.7

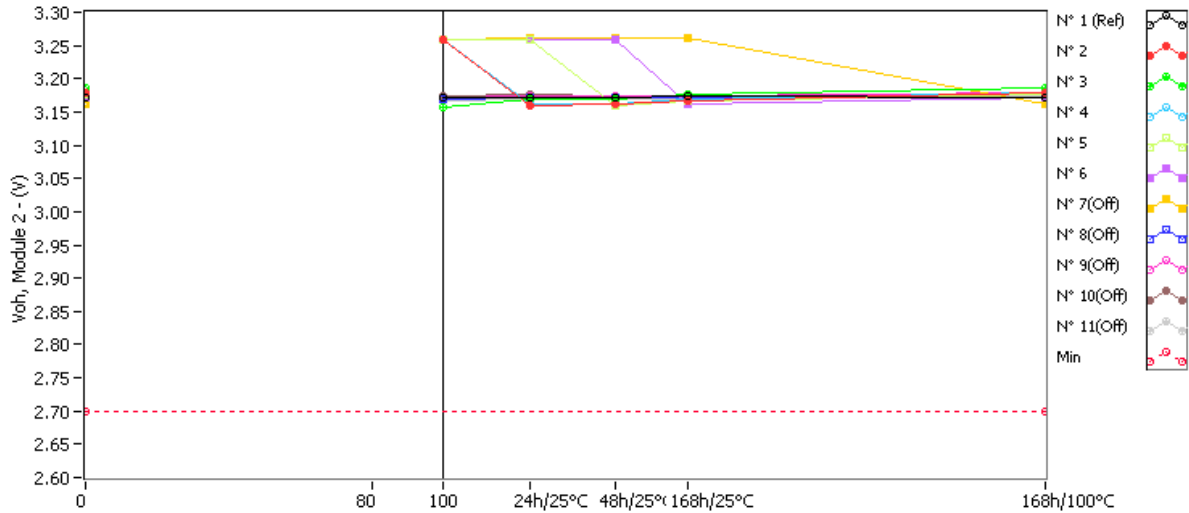
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.171	NaN	3.165	3.170	3.134	3.162	3.171
N° 2	3.176	NaN	3.248	3.156	3.158	3.162	3.176
N° 3	3.182	NaN	3.152	3.154	3.166	3.114	3.182
N° 4	3.177	NaN	3.255	3.155	3.160	3.167	3.177
N° 5	3.173	NaN	3.254	3.150	3.157	3.163	3.173
N° 6	3.169	NaN	3.253	3.259	3.255	3.146	3.169
N° 7(Off)	3.161	NaN	3.121	3.153	3.157	3.157	3.161
N° 8(Off)	3.175	NaN	3.167	3.153	3.169	3.170	3.175
N° 9(Off)	3.176	NaN	3.054	3.083	3.165	3.171	3.176
N° 10(Off)	3.178	NaN	3.169	3.171	3.172	3.172	3.178
N° 11(Off)	3.170	NaN	3.162	3.133	3.165	3.165	3.170

Delta [Voh, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-6.000E-3	-1.000E-3	-3.700E-2	-9.000E-3	0.000E+0
N° 2	---	NaN	7.200E-2	-2.000E-2	-1.800E-2	-1.400E-2	0.000E+0
N° 3	---	NaN	-3.000E-2	-2.800E-2	-1.600E-2	-6.800E-2	0.000E+0
N° 4	---	NaN	7.800E-2	-2.200E-2	-1.700E-2	-1.000E-2	0.000E+0
N° 5	---	NaN	8.100E-2	-2.300E-2	-1.600E-2	-1.000E-2	0.000E+0
N° 6	---	NaN	8.400E-2	9.000E-2	8.600E-2	-2.300E-2	0.000E+0
N° 7(Off)	---	NaN	-4.000E-2	-8.000E-3	-4.000E-3	-4.000E-3	0.000E+0
N° 8(Off)	---	NaN	-8.000E-3	-2.200E-2	-6.000E-3	-5.000E-3	0.000E+0
N° 9(Off)	---	NaN	-1.220E-1	-9.300E-2	-1.100E-2	-5.000E-3	0.000E+0
N° 10(Off)	---	NaN	-9.000E-3	-7.000E-3	-6.000E-3	-6.000E-3	0.000E+0
N° 11(Off)	---	NaN	-8.000E-3	-3.700E-2	-5.000E-3	-5.000E-3	0.000E+0
Average	---	NaN	5.700E-2	-6.000E-4	3.800E-3	-2.500E-2	0.000E+0
s	---	0.000E+0	4.884E-2	5.073E-2	4.596E-2	2.462E-2	0.000E+0
Average+3s	---	NaN	2.035E-1	1.516E-1	1.417E-1	4.885E-2	0.000E+0
Average-3s	---	NaN	-8.951E-2	-1.528E-1	-1.341E-1	-9.885E-2	0.000E+0

42. Voh, Module 2

"Ioh = -0.4mA ; Vcc = 3V"



Voh, Module 2 . (V)

Min = 2.7

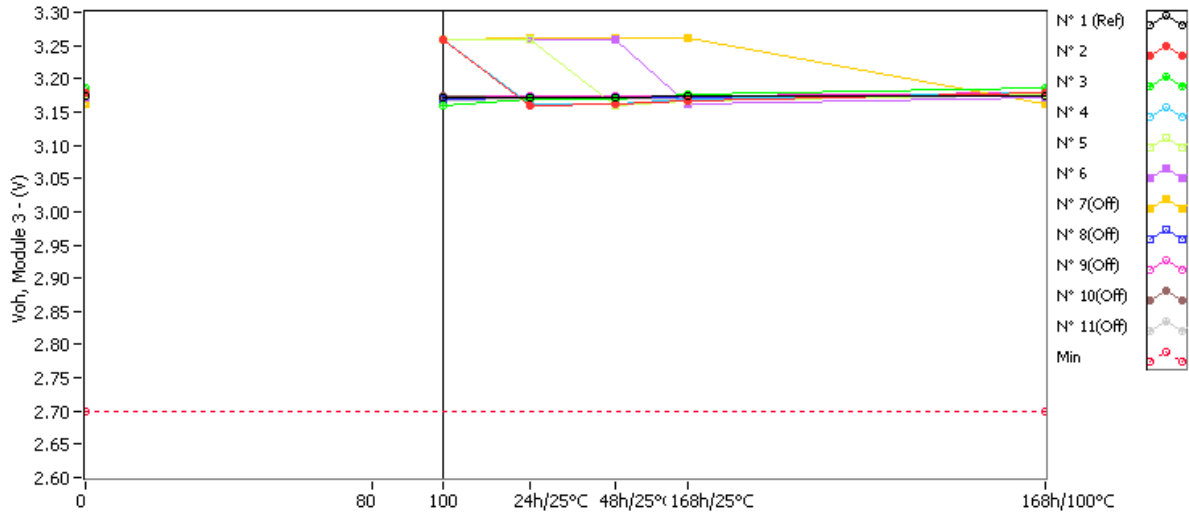
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.172	NaN	3.171	3.172	3.172	3.173	3.172
N° 2	3.179	NaN	3.258	3.160	3.161	3.167	3.179
N° 3	3.186	NaN	3.158	3.168	3.170	3.176	3.186
N° 4	3.179	NaN	3.258	3.162	3.163	3.169	3.179
N° 5	3.176	NaN	3.258	3.260	3.160	3.166	3.176
N° 6	3.171	NaN	3.258	3.260	3.260	3.161	3.171
N° 7(Off)	3.163	NaN	3.260	3.261	3.261	3.262	3.163
N° 8(Off)	3.176	NaN	3.169	3.171	3.171	3.172	3.176
N° 9(Off)	3.178	NaN	3.172	3.174	3.174	3.174	3.178
N° 10(Off)	3.180	NaN	3.174	3.176	3.175	3.175	3.180
N° 11(Off)	3.173	NaN	3.166	3.168	3.168	3.168	3.173

Delta [Voh, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	1.000E-3	0.000E+0
N° 2	---	NaN	7.900E-2	-1.900E-2	-1.800E-2	-1.200E-2	0.000E+0
N° 3	---	NaN	-2.800E-2	-1.800E-2	-1.600E-2	-1.000E-2	0.000E+0
N° 4	---	NaN	7.900E-2	-1.700E-2	-1.600E-2	-1.000E-2	0.000E+0
N° 5	---	NaN	8.200E-2	8.400E-2	-1.600E-2	-1.000E-2	0.000E+0
N° 6	---	NaN	8.700E-2	8.900E-2	8.900E-2	-1.000E-2	0.000E+0
N° 7(Off)	---	NaN	9.700E-2	9.800E-2	9.800E-2	9.900E-2	0.000E+0
N° 8(Off)	---	NaN	-7.000E-3	-5.000E-3	-5.000E-3	-4.000E-3	0.000E+0
N° 9(Off)	---	NaN	-6.000E-3	-4.000E-3	-4.000E-3	-4.000E-3	0.000E+0
N° 10(Off)	---	NaN	-6.000E-3	-4.000E-3	-5.000E-3	-5.000E-3	0.000E+0
N° 11(Off)	---	NaN	-7.000E-3	-5.000E-3	-5.000E-3	-5.000E-3	0.000E+0
Average	---	NaN	5.980E-2	2.380E-2	4.600E-3	-1.040E-2	0.000E+0
s	---	0.000E+0	4.919E-2	5.727E-2	4.719E-2	8.944E-4	0.000E+0
Average+3s	---	NaN	2.074E-1	1.956E-1	1.462E-1	-7.717E-3	0.000E+0
Average-3s	---	NaN	-8.777E-2	-1.480E-1	-1.370E-1	-1.308E-2	0.000E+0

43. Voh, Module 3

"Ioh = -0.4mA ; Vcc = 3V"



Voh, Module 3 . (V)

Min = 2.7

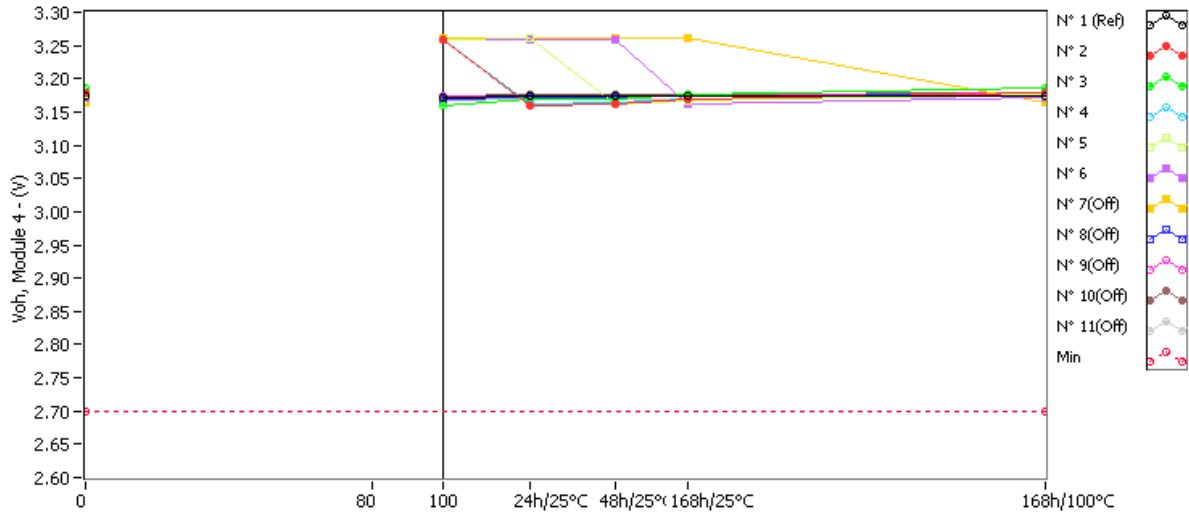
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.173	NaN	3.171	3.172	3.172	3.173	3.173
N° 2	3.179	NaN	3.258	3.160	3.161	3.167	3.179
N° 3	3.186	NaN	3.159	3.168	3.170	3.176	3.186
N° 4	3.180	NaN	3.258	3.162	3.163	3.169	3.180
N° 5	3.176	NaN	3.258	3.260	3.160	3.166	3.176
N° 6	3.171	NaN	3.258	3.260	3.260	3.161	3.171
N° 7(Off)	3.163	NaN	3.260	3.261	3.261	3.262	3.163
N° 8(Off)	3.176	NaN	3.170	3.171	3.171	3.172	3.176
N° 9(Off)	3.178	NaN	3.172	3.174	3.174	3.174	3.178
N° 10(Off)	3.180	NaN	3.174	3.175	3.175	3.175	3.180
N° 11(Off)	3.173	NaN	3.167	3.168	3.168	3.168	3.173

Delta [Voh, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-2.000E-3	-1.000E-3	-1.000E-3	0.000E+0	0.000E+0
N° 2	---	NaN	7.900E-2	-1.900E-2	-1.800E-2	-1.200E-2	0.000E+0
N° 3	---	NaN	-2.700E-2	-1.800E-2	-1.600E-2	-1.000E-2	0.000E+0
N° 4	---	NaN	7.800E-2	-1.800E-2	-1.700E-2	-1.100E-2	0.000E+0
N° 5	---	NaN	8.200E-2	8.400E-2	-1.600E-2	-1.000E-2	0.000E+0
N° 6	---	NaN	8.700E-2	8.900E-2	8.900E-2	-1.000E-2	0.000E+0
N° 7(Off)	---	NaN	9.700E-2	9.800E-2	9.800E-2	9.900E-2	0.000E+0
N° 8(Off)	---	NaN	-6.000E-3	-5.000E-3	-5.000E-3	-4.000E-3	0.000E+0
N° 9(Off)	---	NaN	-6.000E-3	-4.000E-3	-4.000E-3	-4.000E-3	0.000E+0
N° 10(Off)	---	NaN	-6.000E-3	-5.000E-3	-5.000E-3	-5.000E-3	0.000E+0
N° 11(Off)	---	NaN	-6.000E-3	-5.000E-3	-5.000E-3	-5.000E-3	0.000E+0
Average	---	NaN	5.980E-2	2.360E-2	4.400E-3	-1.060E-2	0.000E+0
s	---	0.000E+0	4.865E-2	5.745E-2	4.730E-2	8.944E-4	0.000E+0
Average+3s	---	NaN	2.057E-1	1.959E-1	1.463E-1	-7.917E-3	0.000E+0
Average-3s	---	NaN	-8.615E-2	-1.487E-1	-1.375E-1	-1.328E-2	0.000E+0

44. Voh, Module 4

"Ioh = -0.4mA ; Vcc = 3V"



Voh, Module 4 . (V)

Min = 2.7

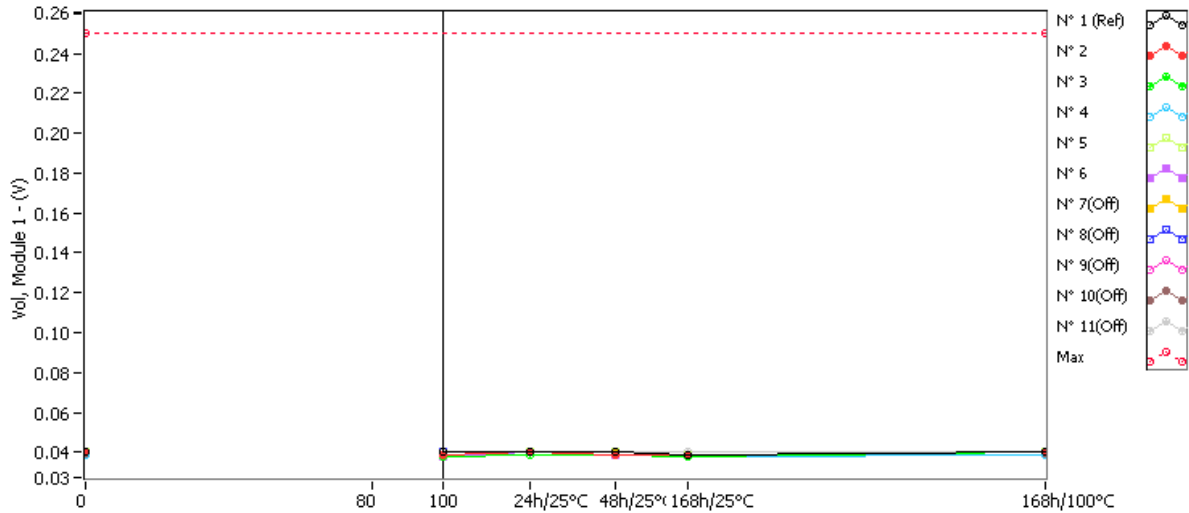
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.173	NaN	3.172	3.173	3.173	3.173	3.173
N° 2	3.180	NaN	3.258	3.160	3.162	3.168	3.180
N° 3	3.187	NaN	3.160	3.169	3.170	3.177	3.187
N° 4	3.180	NaN	3.259	3.162	3.164	3.170	3.180
N° 5	3.176	NaN	3.259	3.261	3.161	3.166	3.176
N° 6	3.172	NaN	3.258	3.260	3.260	3.161	3.172
N° 7(Off)	3.164	NaN	3.261	3.261	3.261	3.262	3.164
N° 8(Off)	3.177	NaN	3.170	3.172	3.172	3.173	3.177
N° 9(Off)	3.179	NaN	3.173	3.174	3.174	3.175	3.179
N° 10(Off)	3.180	NaN	3.174	3.176	3.176	3.176	3.180
N° 11(Off)	3.173	NaN	3.167	3.168	3.168	3.169	3.173

Delta [Voh, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	0.000E+0	0.000E+0
N° 2	---	NaN	7.800E-2	-2.000E-2	-1.800E-2	-1.200E-2	0.000E+0
N° 3	---	NaN	-2.700E-2	-1.800E-2	-1.700E-2	-1.000E-2	0.000E+0
N° 4	---	NaN	7.900E-2	-1.800E-2	-1.600E-2	-1.000E-2	0.000E+0
N° 5	---	NaN	8.300E-2	8.500E-2	-1.500E-2	-1.000E-2	0.000E+0
N° 6	---	NaN	8.600E-2	8.800E-2	8.800E-2	-1.100E-2	0.000E+0
N° 7(Off)	---	NaN	9.700E-2	9.700E-2	9.700E-2	9.800E-2	0.000E+0
N° 8(Off)	---	NaN	-7.000E-3	-5.000E-3	-5.000E-3	-4.000E-3	0.000E+0
N° 9(Off)	---	NaN	-6.000E-3	-5.000E-3	-5.000E-3	-4.000E-3	0.000E+0
N° 10(Off)	---	NaN	-6.000E-3	-4.000E-3	-4.000E-3	-4.000E-3	0.000E+0
N° 11(Off)	---	NaN	-6.000E-3	-5.000E-3	-5.000E-3	-4.000E-3	0.000E+0
Average	---	NaN	5.980E-2	2.340E-2	4.400E-3	-1.060E-2	0.000E+0
s	---	0.000E+0	4.863E-2	5.762E-2	4.675E-2	8.944E-4	0.000E+0
Average+3s	---	NaN	2.057E-1	1.963E-1	1.446E-1	-7.917E-3	0.000E+0
Average-3s	---	NaN	-8.608E-2	-1.495E-1	-1.358E-1	-1.328E-2	0.000E+0

45. Vol, Module 1

"Iol = 2mA ; Vcc = 3V"



Vol, Module 1 . (V)

Max = 0.25

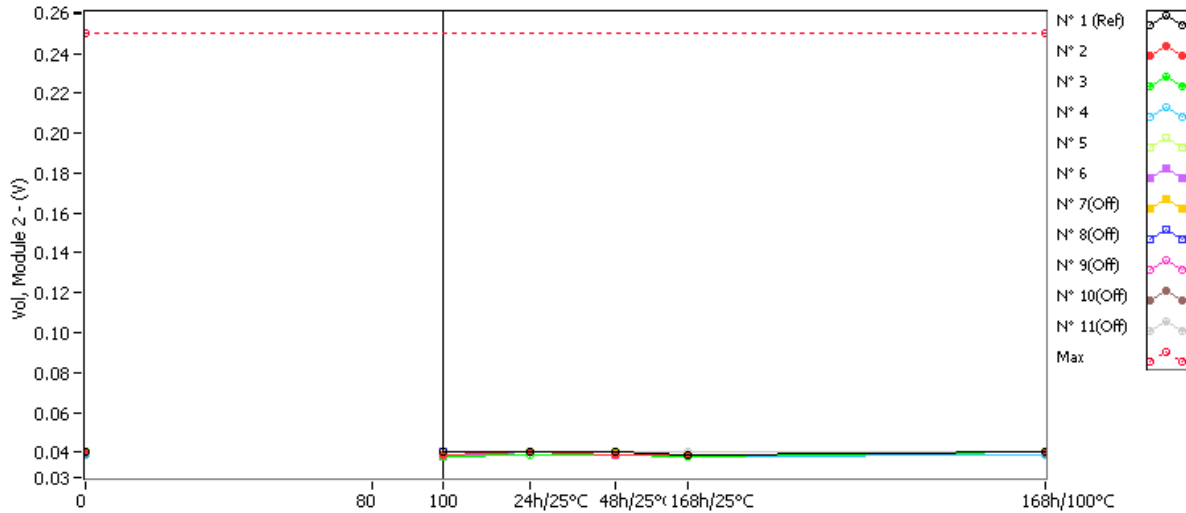
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 2	0.040	NaN	0.039	0.040	0.039	0.039	0.040
N° 3	0.040	NaN	0.038	0.039	0.039	0.038	0.040
N° 4	0.039	NaN	0.038	0.039	0.039	0.038	0.039
N° 5	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 6	0.040	NaN	0.038	0.040	0.039	0.039	0.040
N° 7(Off)	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 8(Off)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 9(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 10(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 11(Off)	0.040	NaN	0.039	0.040	0.040	0.040	0.040

Delta [Vol, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 2	---	NaN	-1.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 3	---	NaN	-2.000E-3	-1.000E-3	-1.000E-3	-2.000E-3	0.000E+0
N° 4	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 5	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 6	---	NaN	-2.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 7(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 8(Off)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 9(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 11(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	0.000E+0	0.000E+0
Average	---	NaN	-1.400E-3	-2.000E-4	-6.000E-4	-1.200E-3	0.000E+0
s	---	0.000E+0	5.477E-4	4.472E-4	5.477E-4	4.472E-4	0.000E+0
Average+3s	---	NaN	2.432E-4	1.142E-3	1.043E-3	1.416E-4	0.000E+0
Average-3s	---	NaN	-3.043E-3	-1.542E-3	-2.243E-3	-2.542E-3	0.000E+0

46. Vol, Module 2

"Iol = 2mA ; Vcc = 3V"



Vol, Module 2 . (V)

Max = 0.25

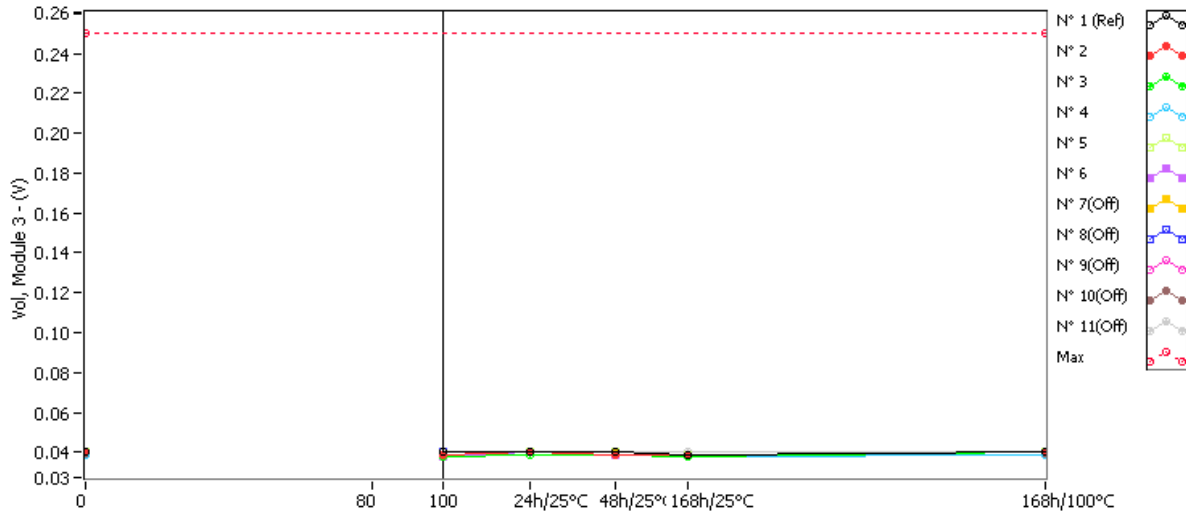
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 2	0.040	NaN	0.039	0.040	0.039	0.039	0.040
N° 3	0.040	NaN	0.038	0.039	0.039	0.038	0.040
N° 4	0.039	NaN	0.038	0.039	0.039	0.038	0.039
N° 5	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 6	0.040	NaN	0.038	0.040	0.039	0.039	0.040
N° 7(Off)	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 8(Off)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 9(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 10(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 11(Off)	0.040	NaN	0.039	0.040	0.040	0.040	0.040

Delta [Vol, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 2	---	NaN	-1.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 3	---	NaN	-2.000E-3	-1.000E-3	-1.000E-3	-2.000E-3	0.000E+0
N° 4	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 5	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 6	---	NaN	-2.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 7(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 8(Off)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 9(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 11(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	0.000E+0	0.000E+0
Average	---	NaN	-1.400E-3	-2.000E-4	-6.000E-4	-1.200E-3	0.000E+0
s	---	0.000E+0	5.477E-4	4.472E-4	5.477E-4	4.472E-4	0.000E+0
Average+3s	---	NaN	2.432E-4	1.142E-3	1.043E-3	1.416E-4	0.000E+0
Average-3s	---	NaN	-3.043E-3	-1.542E-3	-2.243E-3	-2.542E-3	0.000E+0

47. Vol, Module 3

"Iol = 2mA ; Vcc = 3V"



Vol, Module 3 . (V)

Max = 0.25

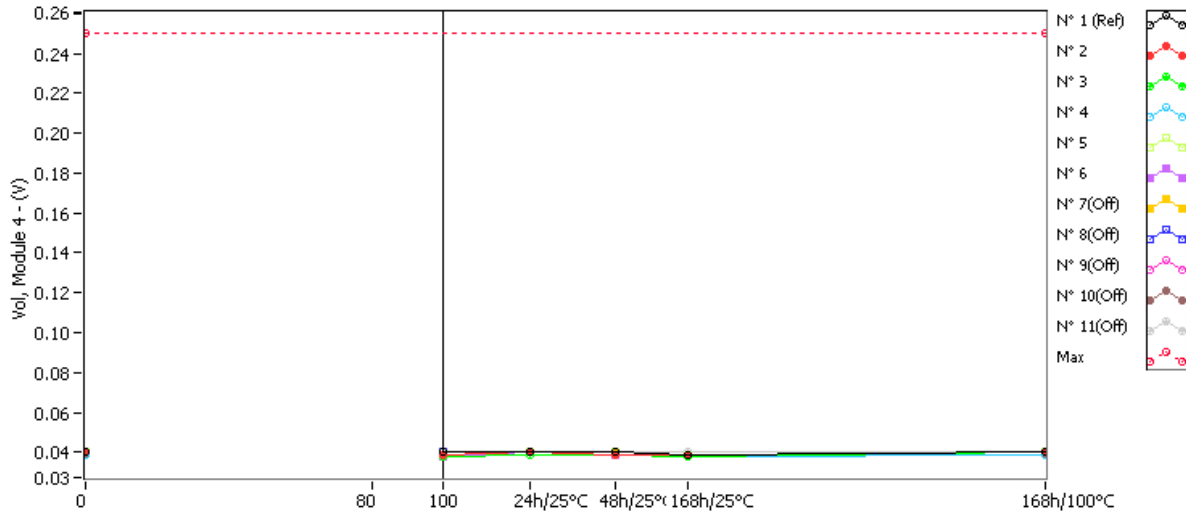
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 2	0.040	NaN	0.039	0.040	0.039	0.039	0.040
N° 3	0.040	NaN	0.038	0.039	0.039	0.038	0.040
N° 4	0.039	NaN	0.038	0.039	0.039	0.038	0.039
N° 5	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 6	0.040	NaN	0.038	0.040	0.039	0.039	0.040
N° 7(Off)	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 8(Off)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 9(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 10(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 11(Off)	0.040	NaN	0.039	0.040	0.040	0.040	0.040

Delta [Vol, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 2	---	NaN	-1.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 3	---	NaN	-2.000E-3	-1.000E-3	-1.000E-3	-2.000E-3	0.000E+0
N° 4	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 5	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 6	---	NaN	-2.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 7(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 8(Off)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 9(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 11(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	0.000E+0	0.000E+0
Average	---	NaN	-1.400E-3	-2.000E-4	-6.000E-4	-1.200E-3	0.000E+0
s	---	0.000E+0	5.477E-4	4.472E-4	5.477E-4	4.472E-4	0.000E+0
Average+3s	---	NaN	2.432E-4	1.142E-3	1.043E-3	1.416E-4	0.000E+0
Average-3s	---	NaN	-3.043E-3	-1.542E-3	-2.243E-3	-2.542E-3	0.000E+0

48. Vol, Module 4

"Iol = 2mA ; Vcc = 3V"



Vol, Module 4 . (V)

Max = 0.25

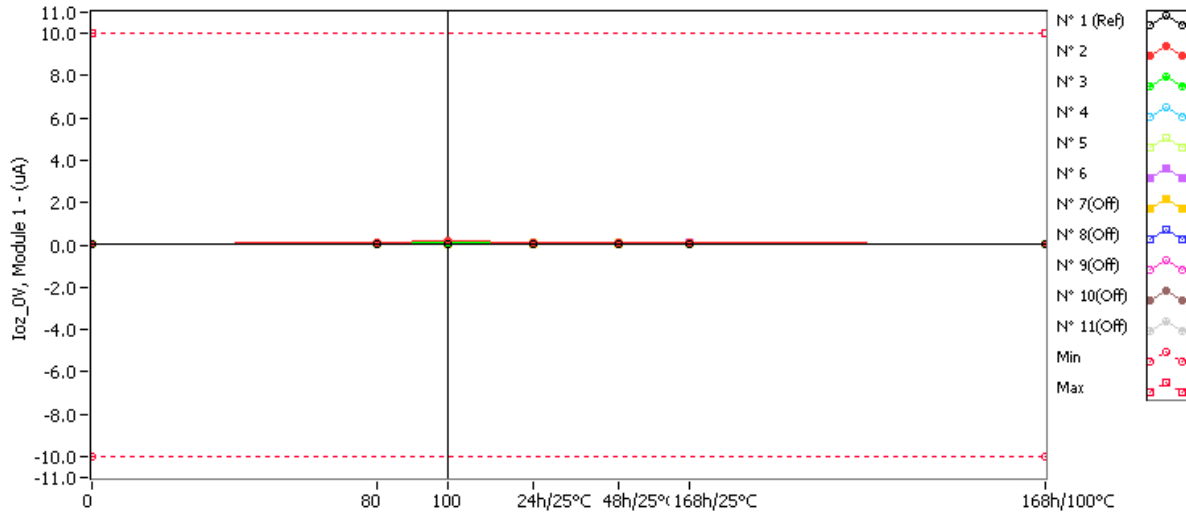
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 2	0.040	NaN	0.039	0.040	0.039	0.039	0.040
N° 3	0.040	NaN	0.038	0.039	0.039	0.038	0.040
N° 4	0.039	NaN	0.038	0.039	0.039	0.038	0.039
N° 5	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 6	0.040	NaN	0.038	0.040	0.039	0.039	0.040
N° 7(Off)	0.040	NaN	0.039	0.040	0.040	0.039	0.040
N° 8(Off)	0.040	NaN	0.040	0.040	0.040	0.039	0.040
N° 9(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 10(Off)	0.039	NaN	0.039	0.040	0.040	0.039	0.039
N° 11(Off)	0.040	NaN	0.039	0.040	0.040	0.040	0.040

Delta [Vol, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 2	---	NaN	-1.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 3	---	NaN	-2.000E-3	-1.000E-3	-1.000E-3	-2.000E-3	0.000E+0
N° 4	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 5	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 6	---	NaN	-2.000E-3	0.000E+0	-1.000E-3	-1.000E-3	0.000E+0
N° 7(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 8(Off)	---	NaN	0.000E+0	0.000E+0	0.000E+0	-1.000E-3	0.000E+0
N° 9(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	0.000E+0	1.000E-3	1.000E-3	0.000E+0	0.000E+0
N° 11(Off)	---	NaN	-1.000E-3	0.000E+0	0.000E+0	0.000E+0	0.000E+0
Average	---	NaN	-1.400E-3	-2.000E-4	-6.000E-4	-1.200E-3	0.000E+0
s	---	0.000E+0	5.477E-4	4.472E-4	5.477E-4	4.472E-4	0.000E+0
Average+3s	---	NaN	2.432E-4	1.142E-3	1.043E-3	1.416E-4	0.000E+0
Average-3s	---	NaN	-3.043E-3	-1.542E-3	-2.243E-3	-2.542E-3	0.000E+0

49. Ioz_0V, Module 1

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 1 . (uA)

Min = -10.0 Max = 10.0

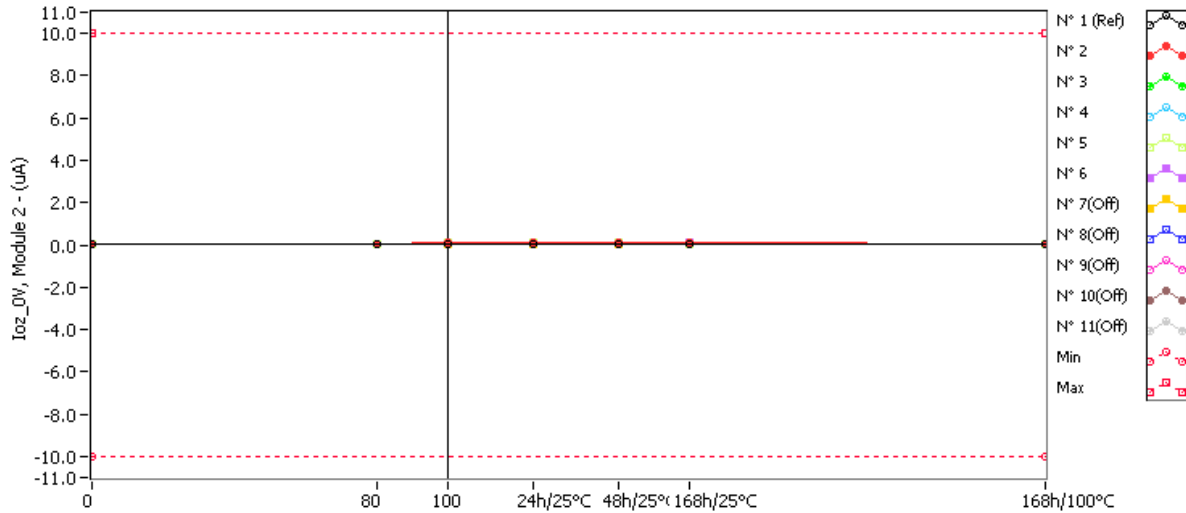
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000093	0.000087	0.000091	0.000036	0.000040	0.000038	0.000046
N° 2	0.000093	0.081571	0.158958	0.097040	0.090660	0.090200	0.000064
N° 3	0.000094	0.070825	0.148038	0.092820	0.082400	0.077150	0.000060
N° 4	0.000095	0.068579	0.145376	0.092990	0.098430	0.082720	0.000059
N° 5	0.000094	0.059939	0.128294	0.082850	0.076530	0.063830	0.000049
N° 6	0.000097	0.062496	0.132309	0.096740	0.084740	0.076360	0.000061
N° 7(Off)	0.000098	0.000101	0.000099	0.000054	0.000054	0.000054	0.000062
N° 8(Off)	0.000095	0.000086	0.000089	0.000042	0.000042	0.000044	0.000043
N° 9(Off)	0.000090	0.000089	0.000088	0.000045	0.000046	0.000049	0.000048
N° 10(Off)	0.000096	0.000089	0.000087	0.000048	0.000046	0.000051	0.000043
N° 11(Off)	0.000097	0.000088	0.000087	0.000045	0.000046	0.000043	0.000044

Delta [Ioz_0V, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-6.000E-6	-2.000E-6	-5.700E-5	-5.300E-5	-5.500E-5	-4.700E-5
N° 2	---	8.148E-2	1.589E-1	9.695E-2	9.057E-2	9.011E-2	-2.900E-5
N° 3	---	7.073E-2	1.479E-1	9.273E-2	8.231E-2	7.706E-2	-3.400E-5
N° 4	---	6.848E-2	1.453E-1	9.290E-2	9.834E-2	8.263E-2	-3.600E-5
N° 5	---	5.985E-2	1.282E-1	8.276E-2	7.644E-2	6.374E-2	-4.500E-5
N° 6	---	6.240E-2	1.322E-1	9.664E-2	8.464E-2	7.626E-2	-3.600E-5
N° 7(Off)	---	3.000E-6	1.000E-6	-4.400E-5	-4.400E-5	-4.400E-5	-3.600E-5
N° 8(Off)	---	-9.000E-6	-6.000E-6	-5.300E-5	-5.300E-5	-5.100E-5	-5.200E-5
N° 9(Off)	---	-1.000E-6	-2.000E-6	-4.500E-5	-4.400E-5	-4.100E-5	-4.200E-5
N° 10(Off)	---	-7.000E-6	-9.000E-6	-4.800E-5	-5.000E-5	-4.500E-5	-5.300E-5
N° 11(Off)	---	-9.000E-6	-1.000E-5	-5.200E-5	-5.100E-5	-5.400E-5	-5.300E-5
Average	---	6.859E-2	1.425E-1	9.239E-2	8.646E-2	7.796E-2	-3.600E-5
s	---	8.448E-3	1.240E-2	5.745E-3	8.350E-3	9.687E-3	5.788E-6
Average+3s	---	9.393E-2	1.797E-1	1.096E-1	1.115E-1	1.070E-1	-1.864E-5
Average-3s	---	4.324E-2	1.053E-1	7.516E-2	6.141E-2	4.890E-2	-5.336E-5

50. Ioz_0V, Module 2

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 2 . (uA)

Min = -10.0 Max = 10.0

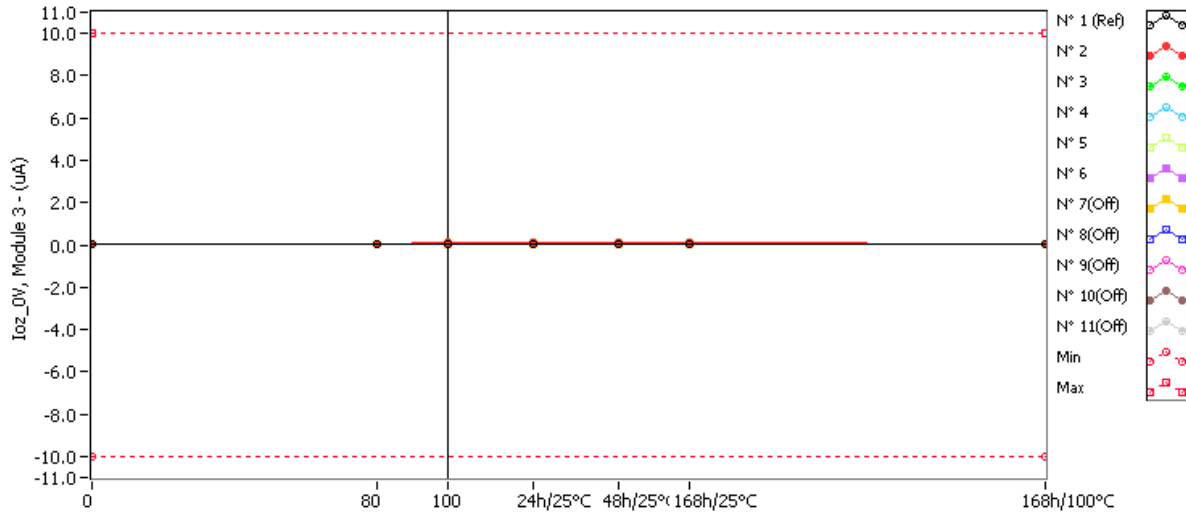
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000094	0.000086	0.000085	0.000040	0.000045	0.000043	0.000052
N° 2	0.000090	0.074839	0.149912	0.108685	0.101539	0.101024	0.000072
N° 3	0.000094	0.063631	0.134289	0.103958	0.092288	0.086408	0.000067
N° 4	0.000095	0.058222	0.126970	0.104149	0.110242	0.092646	0.000066
N° 5	0.000089	0.051046	0.113618	0.092792	0.085714	0.071490	0.000055
N° 6	0.000090	0.055240	0.116616	0.108349	0.094909	0.085523	0.000068
N° 7(Off)	0.000096	0.000089	0.000088	0.000060	0.000060	0.000060	0.000069
N° 8(Off)	0.000090	0.000088	0.000090	0.000047	0.000047	0.000049	0.000048
N° 9(Off)	0.000090	0.000087	0.000088	0.000050	0.000052	0.000055	0.000054
N° 10(Off)	0.000095	0.000089	0.000087	0.000054	0.000052	0.000057	0.000048
N° 11(Off)	0.000090	0.000088	0.000082	0.000050	0.000052	0.000048	0.000049

Delta [Ioz_0V, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-8.000E-6	-9.000E-6	-5.400E-5	-4.900E-5	-5.100E-5	-4.200E-5
N° 2	---	7.475E-2	1.498E-1	1.086E-1	1.014E-1	1.009E-1	-1.800E-5
N° 3	---	6.354E-2	1.342E-1	1.039E-1	9.219E-2	8.631E-2	-2.700E-5
N° 4	---	5.813E-2	1.269E-1	1.041E-1	1.101E-1	9.255E-2	-2.900E-5
N° 5	---	5.096E-2	1.135E-1	9.270E-2	8.562E-2	7.140E-2	-3.400E-5
N° 6	---	5.515E-2	1.165E-1	1.083E-1	9.482E-2	8.543E-2	-2.200E-5
N° 7(Off)	---	-7.000E-6	-8.000E-6	-3.600E-5	-3.600E-5	-3.600E-5	-2.700E-5
N° 8(Off)	---	-2.000E-6	0.000E+0	-4.300E-5	-4.300E-5	-4.100E-5	-4.200E-5
N° 9(Off)	---	-3.000E-6	-2.000E-6	-4.000E-5	-3.800E-5	-3.500E-5	-3.600E-5
N° 10(Off)	---	-6.000E-6	-8.000E-6	-4.100E-5	-4.300E-5	-3.800E-5	-4.700E-5
N° 11(Off)	---	-2.000E-6	-8.000E-6	-4.000E-5	-3.800E-5	-4.200E-5	-4.100E-5
Average	---	6.050E-2	1.282E-1	1.035E-1	9.685E-2	8.733E-2	-2.600E-5
s	---	9.187E-3	1.463E-2	6.435E-3	9.351E-3	1.085E-2	6.205E-6
Average+3s	---	8.806E-2	1.721E-1	1.228E-1	1.249E-1	1.199E-1	-7.385E-6
Average-3s	---	3.294E-2	8.428E-2	8.419E-2	6.879E-2	5.478E-2	-4.461E-5

51. Ioz_0V, Module 3

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 3 . (uA)

Min = -10.0 Max = 10.0

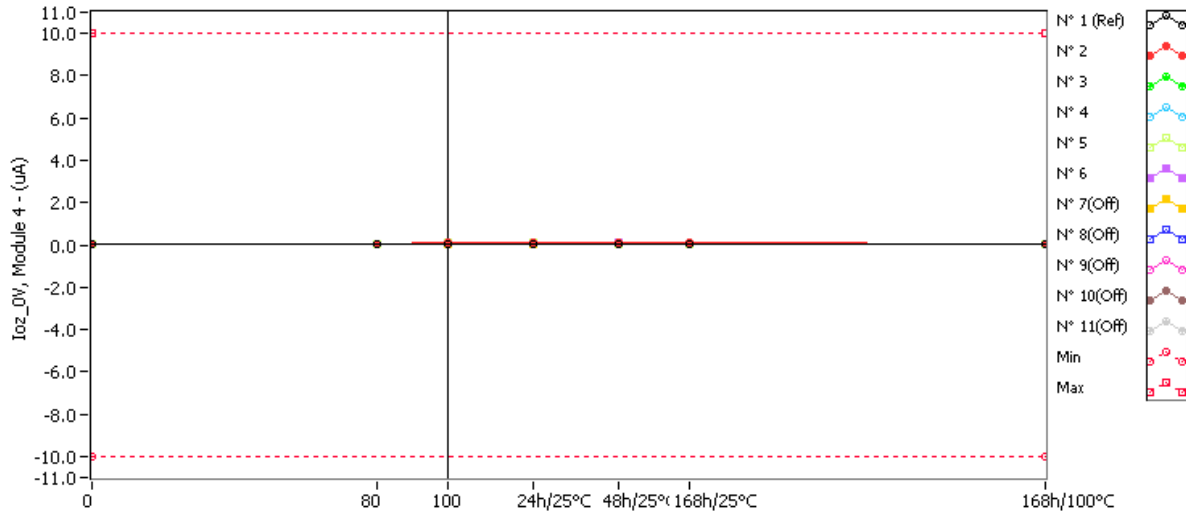
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000097	0.000088	0.000088	0.000044	0.000049	0.000047	0.000057
N° 2	0.000094	0.067219	0.138063	0.119359	0.111512	0.110946	0.000079
N° 3	0.000095	0.057849	0.126119	0.114169	0.101352	0.094895	0.000074
N° 4	0.000097	0.056122	0.120120	0.114378	0.121069	0.101746	0.000073
N° 5	0.000092	0.048786	0.109010	0.101905	0.094132	0.078511	0.000060
N° 6	0.000098	0.051715	0.110286	0.118990	0.104230	0.093923	0.000075
N° 7(Off)	0.000098	0.000087	0.000090	0.000066	0.000066	0.000066	0.000076
N° 8(Off)	0.000099	0.000088	0.000085	0.000052	0.000052	0.000054	0.000053
N° 9(Off)	0.000098	0.000089	0.000086	0.000055	0.000057	0.000060	0.000059
N° 10(Off)	0.000096	0.000089	0.000088	0.000059	0.000057	0.000063	0.000053
N° 11(Off)	0.000101	0.000088	0.000087	0.000055	0.000057	0.000053	0.000054

Delta [Ioz_0V, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-9.000E-6	-9.000E-6	-5.300E-5	-4.800E-5	-5.000E-5	-4.000E-5
N° 2	---	6.713E-2	1.380E-1	1.193E-1	1.114E-1	1.109E-1	-1.500E-5
N° 3	---	5.775E-2	1.260E-1	1.141E-1	1.013E-1	9.480E-2	-2.100E-5
N° 4	---	5.602E-2	1.200E-1	1.143E-1	1.210E-1	1.016E-1	-2.400E-5
N° 5	---	4.869E-2	1.089E-1	1.018E-1	9.404E-2	7.842E-2	-3.200E-5
N° 6	---	5.162E-2	1.102E-1	1.189E-1	1.041E-1	9.383E-2	-2.300E-5
N° 7(Off)	---	-1.100E-5	-8.000E-6	-3.200E-5	-3.200E-5	-3.200E-5	-2.200E-5
N° 8(Off)	---	-1.100E-5	-1.400E-5	-4.700E-5	-4.700E-5	-4.500E-5	-4.600E-5
N° 9(Off)	---	-9.000E-6	-1.200E-5	-4.300E-5	-4.100E-5	-3.800E-5	-3.900E-5
N° 10(Off)	---	-7.000E-6	-8.000E-6	-3.700E-5	-3.900E-5	-3.300E-5	-4.300E-5
N° 11(Off)	---	-1.300E-5	-1.400E-5	-4.600E-5	-4.400E-5	-4.800E-5	-4.700E-5
Average	---	5.624E-2	1.206E-1	1.137E-1	1.064E-1	9.591E-2	-2.300E-5
s	---	7.056E-3	1.200E-2	7.066E-3	1.027E-2	1.191E-2	6.124E-6
Average+3s	---	7.741E-2	1.566E-1	1.349E-1	1.372E-1	1.316E-1	-4.629E-6
Average-3s	---	3.508E-2	8.461E-2	9.247E-2	7.555E-2	6.017E-2	-4.137E-5

52. Ioz_0V, Module 4

"Disabled ; Vout = 0 or Vcc"



Ioz_0V, Module 4 . (uA)

Min = -10.0 Max = 10.0

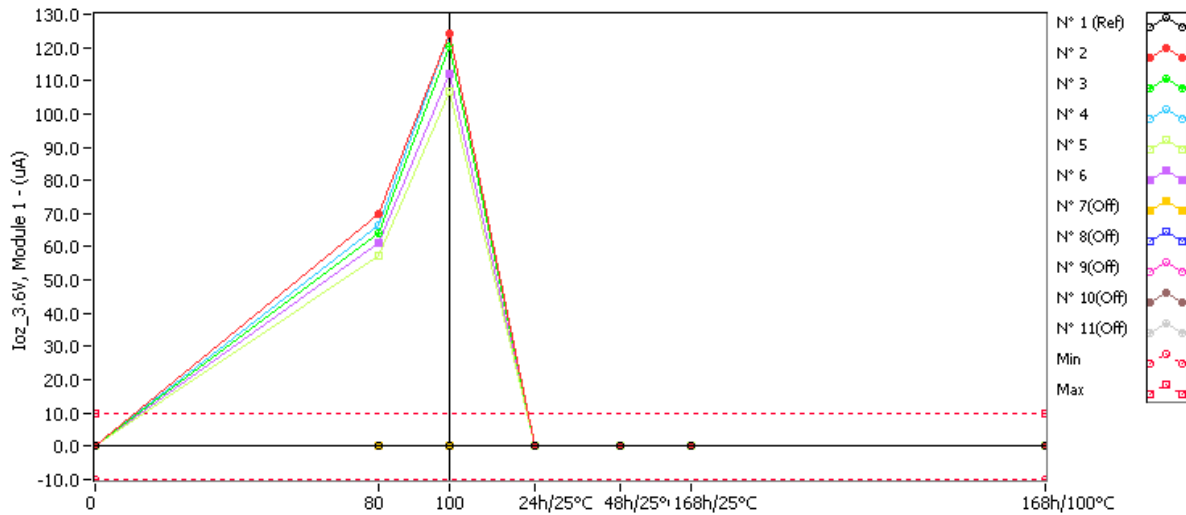
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000096	0.000090	0.000089	0.000034	0.000038	0.000036	0.000044
N° 2	0.000102	0.054212	0.120127	0.092576	0.086490	0.086051	0.000061
N° 3	0.000095	0.047336	0.108091	0.088550	0.078610	0.073601	0.000057
N° 4	0.000100	0.042708	0.101975	0.088712	0.093902	0.078915	0.000056
N° 5	0.000099	0.037646	0.089442	0.079039	0.073010	0.060894	0.000047
N° 6	0.000102	0.041413	0.094492	0.092290	0.080842	0.072847	0.000058
N° 7(Off)	0.000102	0.000091	0.000091	0.000052	0.000052	0.000052	0.000059
N° 8(Off)	0.000099	0.000088	0.000088	0.000040	0.000040	0.000042	0.000041
N° 9(Off)	0.000098	0.000090	0.000090	0.000043	0.000044	0.000047	0.000046
N° 10(Off)	0.000100	0.000089	0.000085	0.000046	0.000044	0.000049	0.000041
N° 11(Off)	0.000102	0.000089	0.000090	0.000043	0.000044	0.000041	0.000042

Delta [Ioz_0V, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-6.000E-6	-7.000E-6	-6.200E-5	-5.800E-5	-6.000E-5	-5.200E-5
N° 2	---	5.411E-2	1.200E-1	9.247E-2	8.639E-2	8.595E-2	-4.100E-5
N° 3	---	4.724E-2	1.080E-1	8.846E-2	7.852E-2	7.351E-2	-3.800E-5
N° 4	---	4.261E-2	1.019E-1	8.861E-2	9.380E-2	7.881E-2	-4.400E-5
N° 5	---	3.755E-2	8.934E-2	7.894E-2	7.291E-2	6.079E-2	-5.200E-5
N° 6	---	4.131E-2	9.439E-2	9.219E-2	8.074E-2	7.274E-2	-4.400E-5
N° 7(Off)	---	-1.100E-5	-1.100E-5	-5.000E-5	-5.000E-5	-5.000E-5	-4.300E-5
N° 8(Off)	---	-1.100E-5	-1.100E-5	-5.900E-5	-5.900E-5	-5.700E-5	-5.800E-5
N° 9(Off)	---	-8.000E-6	-8.000E-6	-5.500E-5	-5.400E-5	-5.100E-5	-5.200E-5
N° 10(Off)	---	-1.100E-5	-1.500E-5	-5.400E-5	-5.600E-5	-5.100E-5	-5.900E-5
N° 11(Off)	---	-1.300E-5	-1.200E-5	-5.900E-5	-5.800E-5	-6.100E-5	-6.000E-5
Average	---	4.456E-2	1.027E-1	8.813E-2	8.247E-2	7.436E-2	-4.380E-5
s	---	6.363E-3	1.200E-2	5.480E-3	7.965E-3	9.240E-3	5.215E-6
Average+3s	---	6.365E-2	1.387E-1	1.046E-1	1.064E-1	1.021E-1	-2.815E-5
Average-3s	---	2.548E-2	6.671E-2	7.169E-2	5.858E-2	4.664E-2	-5.945E-5

53. Ioz_3.6V, Module 1

"Disabled ; Vout = 0 or Vcc"



Ioz_3.6V, Module 1. (uA)

Min = -10.0 Max = 10.0

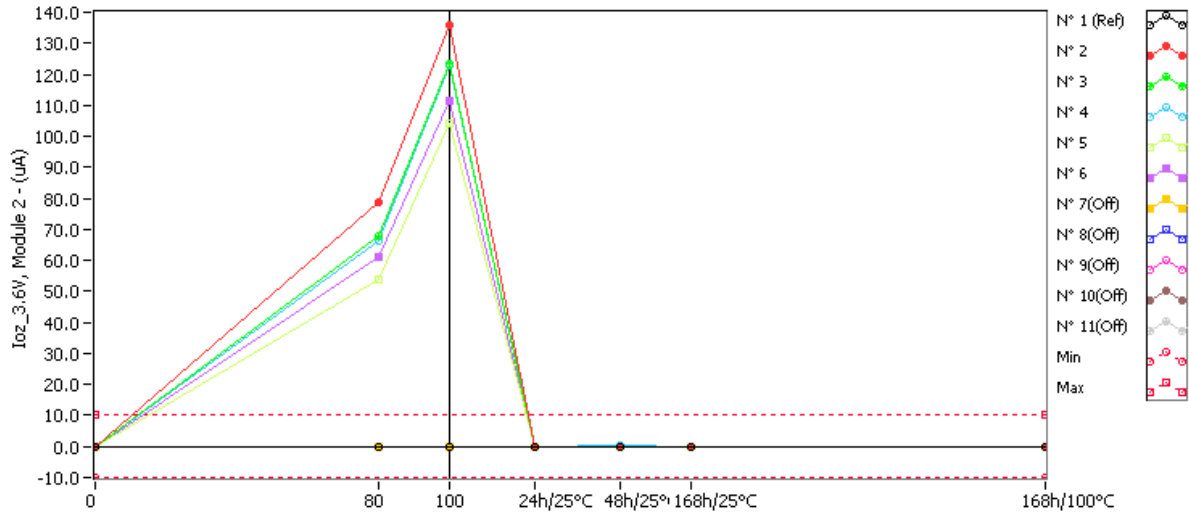
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000069	0.000052	0.000025	0.000036	0.000040	0.000038	0.000046
N° 2	0.000047	69.867700	124.347000	0.097040	0.120660	0.120200	0.000064
N° 3	0.000037	64.219000	120.165000	0.092820	0.112400	0.107150	0.000060
N° 4	0.000064	66.350700	124.082000	0.092990	0.128430	0.112720	0.000059
N° 5	0.000038	57.429300	106.858000	0.082850	0.106530	0.093830	0.000049
N° 6	0.000052	61.097300	112.091000	0.096740	0.114740	0.106360	0.000061
N° 7(Off)	0.000075	0.000040	0.000039	0.000054	0.000054	0.000054	0.000062
N° 8(Off)	0.000040	0.000021	0.000020	0.000042	0.000042	0.000044	0.000043
N° 9(Off)	0.000046	0.000026	0.000026	0.000045	0.000046	0.000049	0.000048
N° 10(Off)	0.000050	0.000028	0.000027	0.000048	0.000046	0.000051	0.000043
N° 11(Off)	0.000046	0.000023	0.000022	0.000045	0.000046	0.000043	0.000044

Delta [Ioz_3.6V, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-1.700E-5	-4.400E-5	-3.300E-5	-2.900E-5	-3.100E-5	-2.300E-5
N° 2	---	6.987E+1	1.243E+2	9.699E-2	1.206E-1	1.202E-1	1.700E-5
N° 3	---	6.422E+1	1.202E+2	9.278E-2	1.124E-1	1.071E-1	2.300E-5
N° 4	---	6.635E+1	1.241E+2	9.293E-2	1.284E-1	1.127E-1	-5.000E-6
N° 5	---	5.743E+1	1.069E+2	8.281E-2	1.065E-1	9.379E-2	1.100E-5
N° 6	---	6.110E+1	1.121E+2	9.669E-2	1.147E-1	1.063E-1	9.000E-6
N° 7(Off)	---	-3.500E-5	-3.600E-5	-2.100E-5	-2.100E-5	-2.100E-5	-1.300E-5
N° 8(Off)	---	-1.900E-5	-2.000E-5	2.000E-6	2.000E-6	4.000E-6	3.000E-6
N° 9(Off)	---	-2.000E-5	-2.000E-5	-1.000E-6	0.000E+0	3.000E-6	2.000E-6
N° 10(Off)	---	-2.200E-5	-2.300E-5	-2.000E-6	-4.000E-6	1.000E-6	-7.000E-6
N° 11(Off)	---	-2.300E-5	-2.400E-5	-1.000E-6	0.000E+0	-3.000E-6	-2.000E-6
Average	---	6.379E+1	1.175E+2	9.244E-2	1.165E-1	1.080E-1	1.100E-5
s	---	4.780E+0	7.743E+0	5.741E-3	8.341E-3	9.681E-3	1.049E-5
Average+3s	---	7.813E+1	1.407E+2	1.097E-1	1.415E-1	1.370E-1	4.246E-5
Average-3s	---	4.945E+1	9.428E+1	7.522E-2	9.148E-2	7.896E-2	-2.046E-5

54. Ioz_3.6V, Module 2

"Disabled ; Vout = 0 or Vcc"



Ioz_3.6V, Module 2 . (uA)

Min = -10.0 Max = 10.0

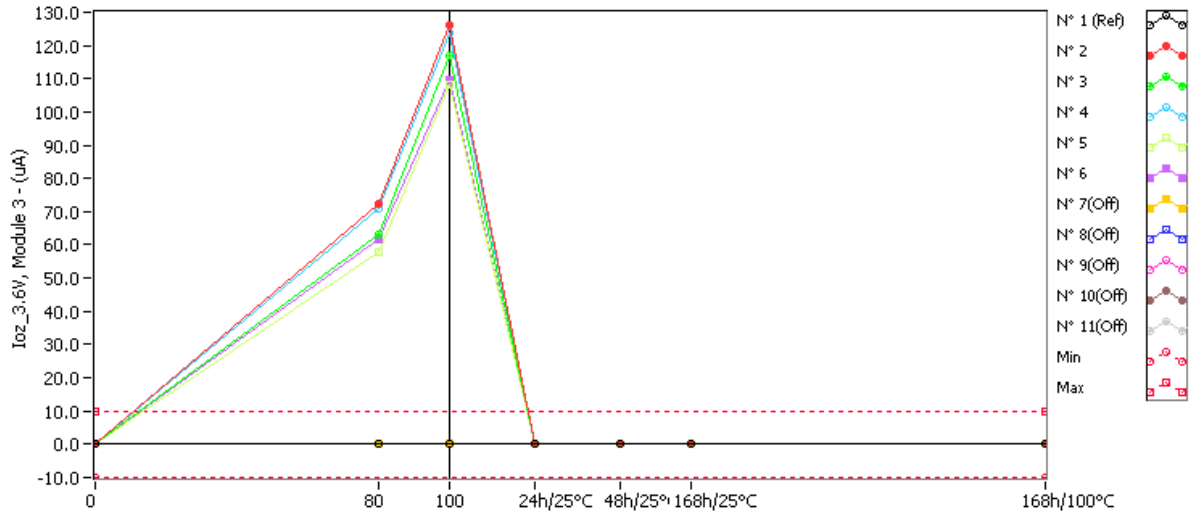
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000042	0.000023	0.000030	0.000036	0.000040	0.000038	0.000046
N° 2	0.000052	78.625400	135.847000	0.097040	0.120660	0.120200	0.000064
N° 3	0.000053	67.636700	123.598000	0.092820	0.112400	0.107150	0.000060
N° 4	0.000047	66.479900	122.877000	0.092990	0.128430	0.112720	0.000059
N° 5	0.000043	53.643400	104.043000	0.082850	0.106530	0.093830	0.000049
N° 6	0.000040	61.009300	111.282000	0.096740	0.114740	0.106360	0.000061
N° 7(Off)	0.000052	0.000028	0.000027	0.000054	0.000054	0.000054	0.000062
N° 8(Off)	0.000037	0.000020	0.000020	0.000042	0.000042	0.000044	0.000043
N° 9(Off)	0.000053	0.000032	0.000031	0.000045	0.000046	0.000049	0.000048
N° 10(Off)	0.000099	0.000057	0.000056	0.000048	0.000046	0.000051	0.000043
N° 11(Off)	0.000042	0.000021	0.000021	0.000045	0.000046	0.000043	0.000044

Delta [Ioz_3.6V, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-1.900E-5	-1.200E-5	-6.000E-6	-2.000E-6	-4.000E-6	4.000E-6
N° 2	---	7.863E+1	1.358E+2	9.699E-2	1.206E-1	1.201E-1	1.200E-5
N° 3	---	6.764E+1	1.236E+2	9.277E-2	1.123E-1	1.071E-1	7.000E-6
N° 4	---	6.648E+1	1.229E+2	9.294E-2	1.284E-1	1.127E-1	1.200E-5
N° 5	---	5.364E+1	1.040E+2	8.281E-2	1.065E-1	9.379E-2	6.000E-6
N° 6	---	6.101E+1	1.113E+2	9.670E-2	1.147E-1	1.063E-1	2.100E-5
N° 7(Off)	---	-2.400E-5	-2.500E-5	2.000E-6	2.000E-6	2.000E-6	1.000E-5
N° 8(Off)	---	-1.700E-5	-1.700E-5	5.000E-6	5.000E-6	7.000E-6	6.000E-6
N° 9(Off)	---	-2.100E-5	-2.200E-5	-8.000E-6	-7.000E-6	-4.000E-6	-5.000E-6
N° 10(Off)	---	-4.200E-5	-4.300E-5	-5.100E-5	-5.300E-5	-4.800E-5	-5.600E-5
N° 11(Off)	---	-2.100E-5	-2.100E-5	3.000E-6	4.000E-6	1.000E-6	2.000E-6
Average	---	6.548E+1	1.195E+2	9.244E-2	1.165E-1	1.080E-1	1.160E-5
s	---	9.200E+0	1.227E+1	5.744E-3	8.349E-3	9.683E-3	5.941E-6
Average+3s	---	9.308E+1	1.563E+2	1.097E-1	1.416E-1	1.371E-1	2.942E-5
Average-3s	---	3.788E+1	8.273E+1	7.521E-2	9.146E-2	7.896E-2	-6.224E-6

55. Ioz_3.6V, Module 3

"Disabled ; Vout = 0 or Vcc"



Ioz_3.6V, Module 3 . (uA)

Min = -10.0 Max = 10.0

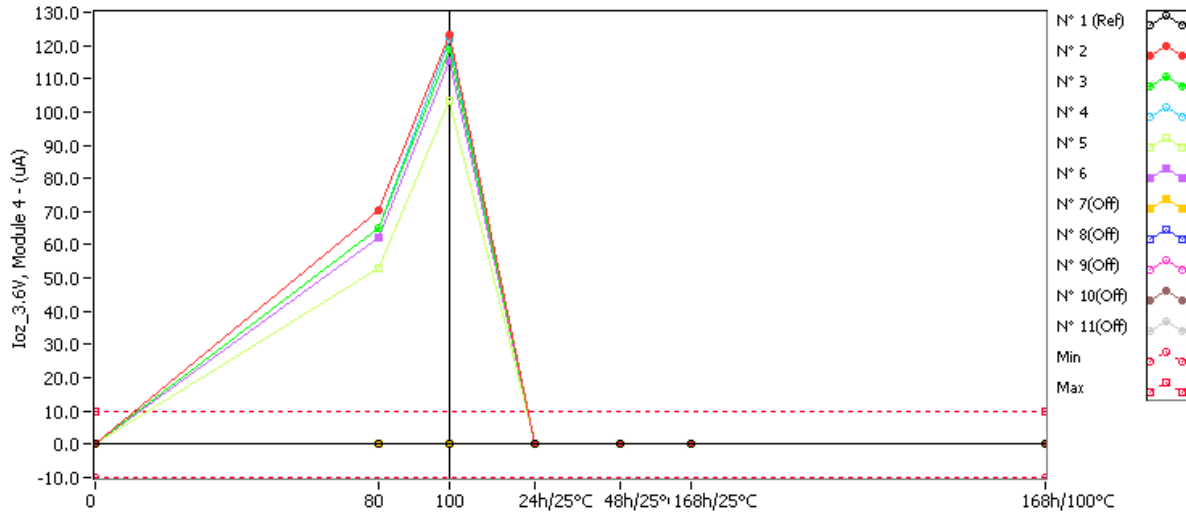
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000034	0.000018	0.000018	0.000036	0.000040	0.000038	0.000046
N° 2	0.000039	72.139800	125.910000	0.097040	0.120660	0.120200	0.000064
N° 3	0.000033	63.281700	116.956000	0.092820	0.112400	0.107150	0.000060
N° 4	0.000052	71.075400	123.907000	0.092990	0.128430	0.112720	0.000059
N° 5	0.000195	57.593000	108.234000	0.082850	0.106530	0.093830	0.000049
N° 6	0.000054	61.765700	109.476000	0.096740	0.114740	0.106360	0.000061
N° 7(Off)	0.000051	0.000027	0.000026	0.000054	0.000054	0.000054	0.000062
N° 8(Off)	0.000036	0.000018	0.000016	0.000042	0.000042	0.000044	0.000043
N° 9(Off)	0.000061	0.000038	0.000032	0.000045	0.000046	0.000049	0.000048
N° 10(Off)	0.000050	0.000027	0.000028	0.000048	0.000046	0.000051	0.000043
N° 11(Off)	0.000038	0.000019	0.000017	0.000045	0.000046	0.000043	0.000044

Delta [Ioz_3.6V, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-1.600E-5	-1.600E-5	2.000E-6	6.000E-6	4.000E-6	1.200E-5
N° 2	---	7.214E+1	1.259E+2	9.700E-2	1.206E-1	1.202E-1	2.500E-5
N° 3	---	6.328E+1	1.170E+2	9.279E-2	1.124E-1	1.071E-1	2.700E-5
N° 4	---	7.108E+1	1.239E+2	9.294E-2	1.284E-1	1.127E-1	7.000E-6
N° 5	---	5.759E+1	1.082E+2	8.265E-2	1.063E-1	9.363E-2	-1.460E-4
N° 6	---	6.177E+1	1.095E+2	9.669E-2	1.147E-1	1.063E-1	7.000E-6
N° 7(Off)	---	-2.400E-5	-2.500E-5	3.000E-6	3.000E-6	3.000E-6	1.100E-5
N° 8(Off)	---	-1.800E-5	-2.000E-5	6.000E-6	6.000E-6	8.000E-6	7.000E-6
N° 9(Off)	---	-2.300E-5	-2.900E-5	-1.600E-5	-1.500E-5	-1.200E-5	-1.300E-5
N° 10(Off)	---	-2.300E-5	-2.200E-5	-2.000E-6	-4.000E-6	1.000E-6	-7.000E-6
N° 11(Off)	---	-1.900E-5	-2.100E-5	7.000E-6	8.000E-6	5.000E-6	6.000E-6
Average	---	6.517E+1	1.169E+2	9.241E-2	1.165E-1	1.080E-1	-1.600E-5
s	---	6.245E+0	8.070E+0	5.808E-3	8.393E-3	9.743E-3	7.329E-5
Average+3s	---	8.391E+1	1.411E+2	1.098E-1	1.417E-1	1.372E-1	2.039E-4
Average-3s	---	4.643E+1	9.269E+1	7.499E-2	9.130E-2	7.875E-2	-2.359E-4

56. Ioz_3.6V, Module 4

"Disabled ; Vout = 0 or Vcc"



Ioz_3.6V, Module 4 . (uA)

Min = -10.0 Max = 10.0

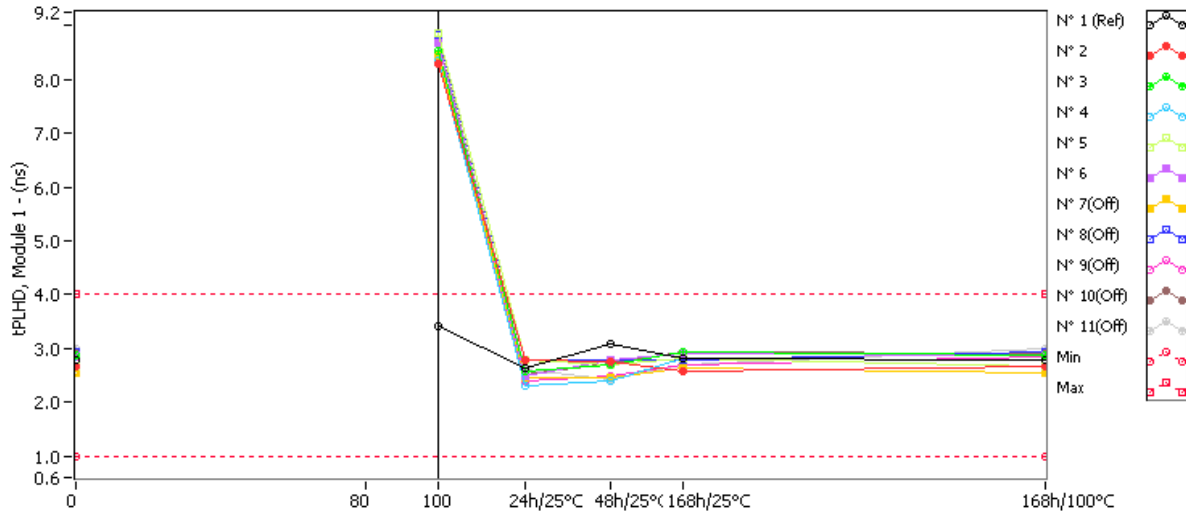
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.000061	0.000035	0.000035	0.000036	0.000040	0.000038	0.000046
N° 2	0.000047	70.530800	123.191000	0.097040	0.120660	0.120200	0.000064
N° 3	0.000037	65.275000	118.913000	0.092820	0.112400	0.107150	0.000060
N° 4	0.000051	64.875900	121.848000	0.092990	0.128430	0.112720	0.000059
N° 5	0.000034	53.150300	103.439000	0.082850	0.106530	0.093830	0.000049
N° 6	0.000040	62.022500	115.497000	0.096740	0.114740	0.106360	0.000061
N° 7(Off)	0.000154	0.000086	0.000084	0.000054	0.000054	0.000054	0.000062
N° 8(Off)	0.000037	0.000019	0.000022	0.000042	0.000042	0.000044	0.000043
N° 9(Off)	0.000038	0.000020	0.000020	0.000045	0.000046	0.000049	0.000048
N° 10(Off)	0.000042	0.000023	0.000022	0.000048	0.000046	0.000051	0.000043
N° 11(Off)	0.000053	0.000030	0.000035	0.000045	0.000046	0.000043	0.000044

Delta [Ioz_3.6V, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	-2.600E-5	-2.600E-5	-2.500E-5	-2.100E-5	-2.300E-5	-1.500E-5
N° 2	---	7.053E+1	1.232E+2	9.699E-2	1.206E-1	1.202E-1	1.700E-5
N° 3	---	6.527E+1	1.189E+2	9.278E-2	1.124E-1	1.071E-1	2.300E-5
N° 4	---	6.488E+1	1.218E+2	9.294E-2	1.284E-1	1.127E-1	8.000E-6
N° 5	---	5.315E+1	1.034E+2	8.282E-2	1.065E-1	9.380E-2	1.500E-5
N° 6	---	6.202E+1	1.155E+2	9.670E-2	1.147E-1	1.063E-1	2.100E-5
N° 7(Off)	---	-6.800E-5	-7.000E-5	-1.000E-4	-1.000E-4	-1.000E-4	-9.200E-5
N° 8(Off)	---	-1.800E-5	-1.500E-5	5.000E-6	5.000E-6	7.000E-6	6.000E-6
N° 9(Off)	---	-1.800E-5	-1.800E-5	7.000E-6	8.000E-6	1.100E-5	1.000E-5
N° 10(Off)	---	-1.900E-5	-2.000E-5	6.000E-6	4.000E-6	9.000E-6	1.000E-6
N° 11(Off)	---	-2.300E-5	-1.800E-5	-8.000E-6	-7.000E-6	-1.000E-5	-9.000E-6
Average	---	6.317E+1	1.166E+2	9.245E-2	1.165E-1	1.080E-1	1.680E-5
s	---	6.388E+0	7.918E+0	5.742E-3	8.344E-3	9.681E-3	5.848E-6
Average+3s	---	8.234E+1	1.403E+2	1.097E-1	1.415E-1	1.371E-1	3.434E-5
Average-3s	---	4.401E+1	9.282E+1	7.522E-2	9.148E-2	7.897E-2	-7.442E-7

57. tPLHD, Module 1

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPLHD, Module 1 . (ns)

Min = 1.0 Max = 4.0

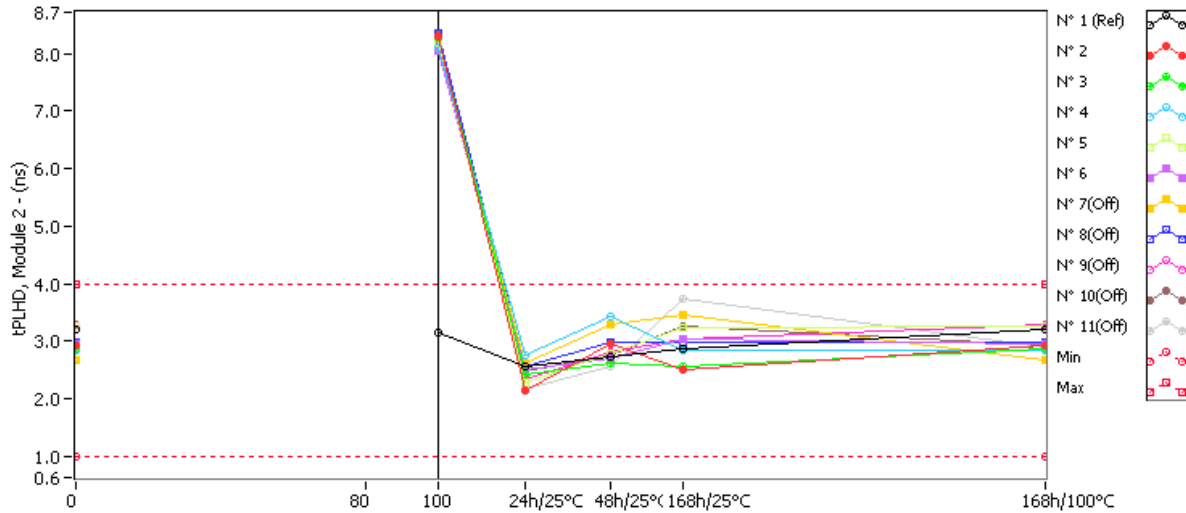
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	2.775	NaN	3.425	2.650	2.825	2.825	2.775
N° 2	2.675	NaN	8.275	2.775	2.750	2.575	2.675
N° 3	2.875	NaN	8.525	2.575	2.700	2.925	2.875
N° 4	2.800	NaN	8.350	2.325	2.400	2.825	2.800
N° 5	2.675	NaN	8.850	2.775	2.700	2.825	2.675
N° 6	2.875	NaN	8.675	2.500	2.775	2.900	2.875
N° 7(Off)	2.550	NaN	8.450	2.450	2.450	2.625	2.550
N° 8(Off)	2.950	NaN	8.825	2.775	2.800	2.775	2.950
N° 9(Off)	2.850	NaN	8.400	2.400	2.500	2.700	2.850
N° 10(Off)	2.900	NaN	8.700	2.525	2.725	2.925	2.900
N° 11(Off)	3.000	NaN	8.700	2.600	2.425	2.700	3.000

Delta [tPLHD, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	6.500E-1	-1.250E-1	3.000E-1	5.000E-2	0.000E+0
N° 2	---	NaN	5.600E+0	1.000E-1	7.500E-2	-1.000E-1	0.000E+0
N° 3	---	NaN	5.650E+0	-3.000E-1	-1.750E-1	5.000E-2	0.000E+0
N° 4	---	NaN	5.550E+0	-4.750E-1	-4.000E-1	2.500E-2	0.000E+0
N° 5	---	NaN	6.175E+0	1.000E-1	2.500E-2	1.500E-1	0.000E+0
N° 6	---	NaN	5.800E+0	-3.750E-1	-1.000E-1	2.500E-2	0.000E+0
N° 7(Off)	---	NaN	5.900E+0	-1.000E-1	-1.000E-1	7.500E-2	0.000E+0
N° 8(Off)	---	NaN	5.875E+0	-1.750E-1	-1.500E-1	-1.750E-1	0.000E+0
N° 9(Off)	---	NaN	5.550E+0	-4.500E-1	-3.500E-1	-1.500E-1	0.000E+0
N° 10(Off)	---	NaN	5.800E+0	-3.750E-1	-1.750E-1	2.500E-2	0.000E+0
N° 11(Off)	---	NaN	5.700E+0	-4.000E-1	-5.750E-1	-3.000E-1	0.000E+0
Average	---	NaN	5.755E+0	-1.900E-1	-1.150E-1	3.000E-2	0.000E+0
s	---	0.000E+0	2.527E-1	2.719E-1	1.876E-1	8.909E-2	0.000E+0
Average+3s	---	NaN	6.513E+0	6.257E-1	4.477E-1	2.973E-1	0.000E+0
Average-3s	---	NaN	4.997E+0	-1.006E+0	-6.777E-1	-2.373E-1	0.000E+0

58. tPLHD, Module 2

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPLHD, Module 2 . (ns)

Min = 1.0 Max = 4.0

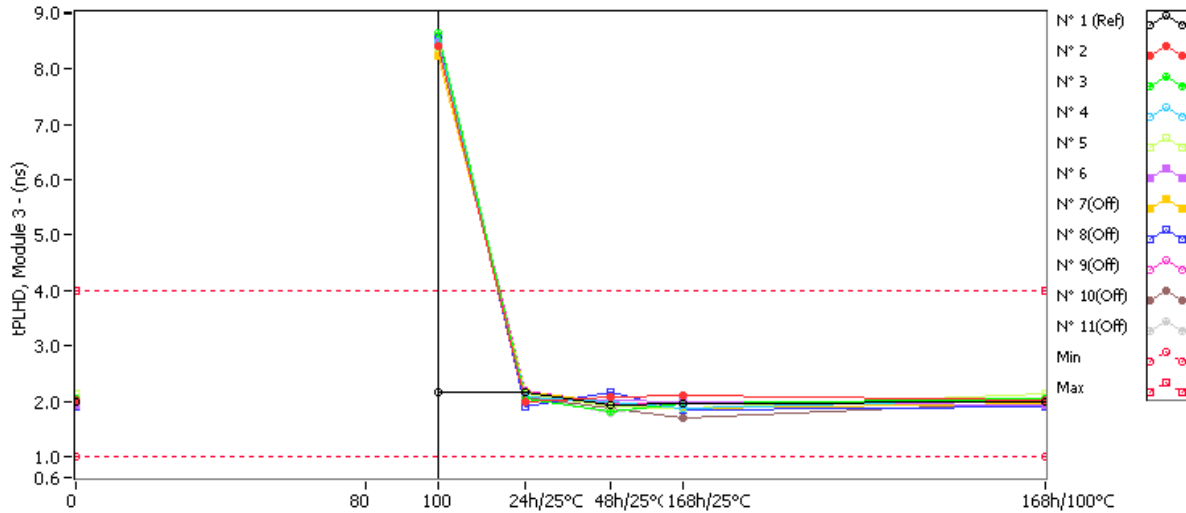
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.200	NaN	3.150	2.550	2.725	2.875	3.200
N° 2	2.925	NaN	8.300	2.150	2.950	2.500	2.925
N° 3	2.875	NaN	8.275	2.425	2.625	2.575	2.875
N° 4	2.850	NaN	8.100	2.750	3.425	2.850	2.850
N° 5	3.275	NaN	8.175	2.275	2.800	3.225	3.275
N° 6	2.950	NaN	8.050	2.500	2.700	3.050	2.950
N° 7(Off)	2.675	NaN	8.050	2.625	3.300	3.450	2.675
N° 8(Off)	2.975	NaN	8.350	2.550	2.975	2.975	2.975
N° 9(Off)	3.300	NaN	8.125	2.350	2.825	3.050	3.300
N° 10(Off)	2.925	NaN	8.350	2.475	2.750	3.275	2.925
N° 11(Off)	2.900	NaN	8.350	2.175	2.575	3.750	2.900

Delta [tPLHD, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-5.000E-2	-6.500E-1	-4.750E-1	-3.250E-1	0.000E+0
N° 2	---	NaN	5.375E+0	-7.750E-1	2.500E-2	-4.250E-1	0.000E+0
N° 3	---	NaN	5.400E+0	-4.500E-1	-2.500E-1	-3.000E-1	0.000E+0
N° 4	---	NaN	5.250E+0	-1.000E-1	5.750E-1	0.000E+0	0.000E+0
N° 5	---	NaN	4.900E+0	-1.000E+0	-4.750E-1	-5.000E-2	0.000E+0
N° 6	---	NaN	5.100E+0	-4.500E-1	-2.500E-1	1.000E-1	0.000E+0
N° 7(Off)	---	NaN	5.375E+0	-5.000E-2	6.250E-1	7.750E-1	0.000E+0
N° 8(Off)	---	NaN	5.375E+0	-4.250E-1	0.000E+0	0.000E+0	0.000E+0
N° 9(Off)	---	NaN	4.825E+0	-9.500E-1	-4.750E-1	-2.500E-1	0.000E+0
N° 10(Off)	---	NaN	5.425E+0	-4.500E-1	-1.750E-1	3.500E-1	0.000E+0
N° 11(Off)	---	NaN	5.450E+0	-7.250E-1	-3.250E-1	8.500E-1	0.000E+0
Average	---	NaN	5.205E+0	-5.550E-1	-7.500E-2	-1.350E-1	0.000E+0
s	---	0.000E+0	2.080E-1	3.448E-1	4.043E-1	2.191E-1	0.000E+0
Average+3s	---	NaN	5.829E+0	4.793E-1	1.138E+0	5.223E-1	0.000E+0
Average-3s	---	NaN	4.581E+0	-1.589E+0	-1.288E+0	-7.923E-1	0.000E+0

59. tPLHD, Module 3

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPLHD, Module 3 . (ns)

Min = 1.0 Max = 4.0

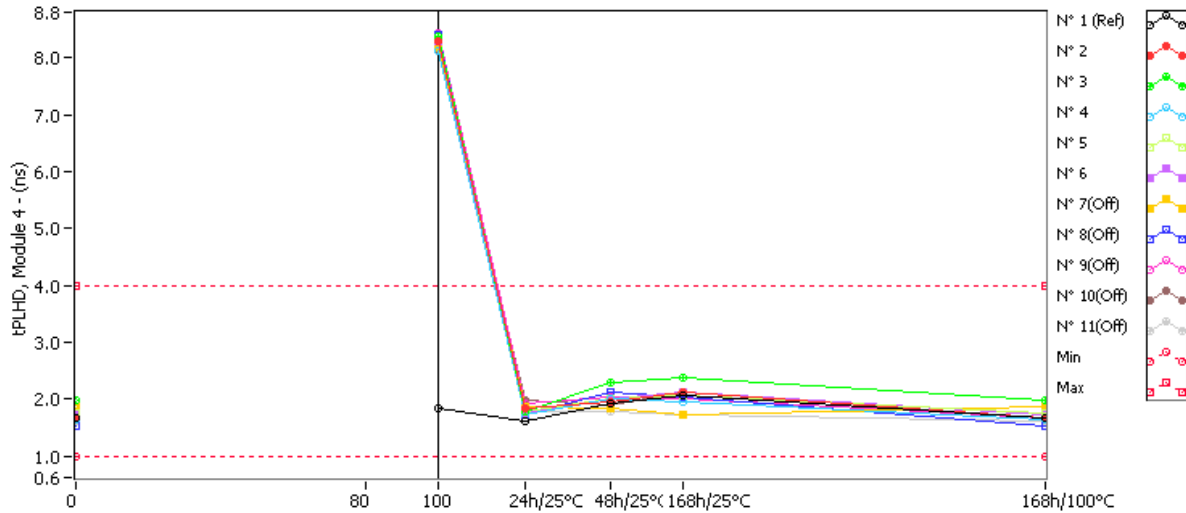
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	1.975	NaN	2.150	2.175	1.925	1.950	1.975
N° 2	2.025	NaN	8.425	2.000	2.075	2.100	2.025
N° 3	2.050	NaN	8.650	2.050	1.825	1.950	2.050
N° 4	2.050	NaN	8.500	2.075	2.000	1.875	2.050
N° 5	2.125	NaN	8.400	2.125	1.900	1.875	2.125
N° 6	1.925	NaN	8.475	2.075	2.025	1.975	1.925
N° 7(Off)	1.950	NaN	8.250	2.150	1.975	1.875	1.950
N° 8(Off)	1.900	NaN	8.575	1.900	2.150	1.850	1.900
N° 9(Off)	1.925	NaN	8.450	2.200	1.950	2.000	1.925
N° 10(Off)	2.000	NaN	8.500	2.075	1.875	1.700	2.000
N° 11(Off)	2.000	NaN	8.475	2.100	1.775	2.000	2.000

Delta [tPLHD, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	1.750E-1	2.000E-1	-5.000E-2	-2.500E-2	0.000E+0
N° 2	---	NaN	6.400E+0	-2.500E-2	5.000E-2	7.500E-2	0.000E+0
N° 3	---	NaN	6.600E+0	0.000E+0	-2.250E-1	-1.000E-1	0.000E+0
N° 4	---	NaN	6.450E+0	2.500E-2	-5.000E-2	-1.750E-1	0.000E+0
N° 5	---	NaN	6.275E+0	0.000E+0	-2.250E-1	-2.500E-1	0.000E+0
N° 6	---	NaN	6.550E+0	1.500E-1	1.000E-1	5.000E-2	0.000E+0
N° 7(Off)	---	NaN	6.300E+0	2.000E-1	2.500E-2	-7.500E-2	0.000E+0
N° 8(Off)	---	NaN	6.675E+0	0.000E+0	2.500E-1	-5.000E-2	0.000E+0
N° 9(Off)	---	NaN	6.525E+0	2.750E-1	2.500E-2	7.500E-2	0.000E+0
N° 10(Off)	---	NaN	6.500E+0	7.500E-2	-1.250E-1	-3.000E-1	0.000E+0
N° 11(Off)	---	NaN	6.475E+0	1.000E-1	-2.250E-1	0.000E+0	0.000E+0
Average	---	NaN	6.455E+0	3.000E-2	-7.000E-2	-8.000E-2	0.000E+0
s	---	0.000E+0	1.280E-1	6.937E-2	1.515E-1	1.408E-1	0.000E+0
Average+3s	---	NaN	6.839E+0	2.381E-1	3.844E-1	3.423E-1	0.000E+0
Average-3s	---	NaN	6.071E+0	-1.781E-1	-5.244E-1	-5.023E-1	0.000E+0

60. tPLHD, Module 4

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPLHD, Module 4 . (ns)

Min = 1.0 Max = 4.0

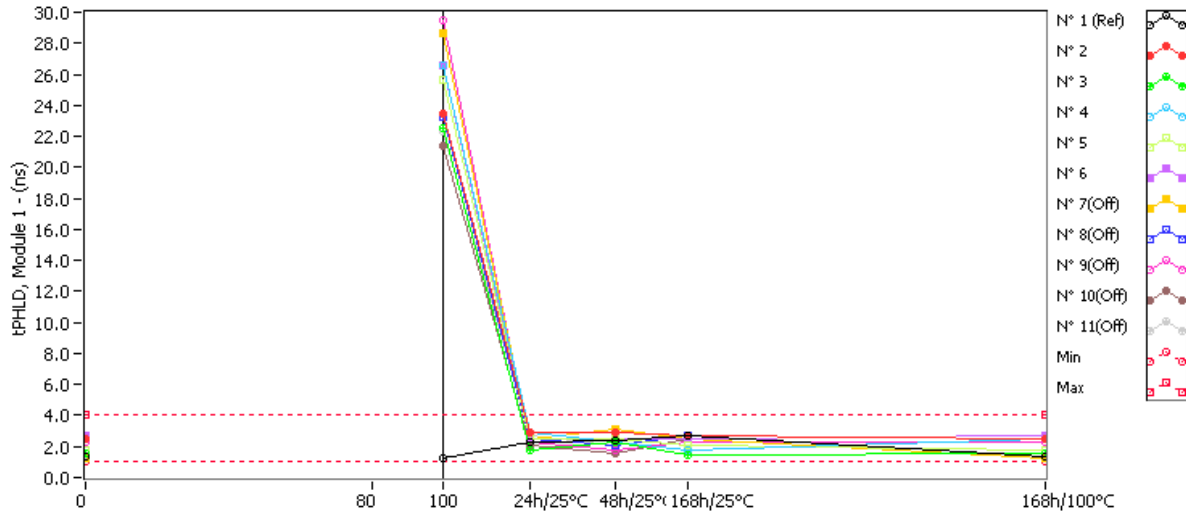
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	1.675	NaN	1.850	1.625	1.925	2.075	1.675
N° 2	1.675	NaN	8.275	1.850	1.950	2.125	1.675
N° 3	1.975	NaN	8.375	1.800	2.300	2.375	1.975
N° 4	1.650	NaN	8.125	1.725	2.000	1.950	1.650
N° 5	1.750	NaN	8.325	1.800	2.025	2.075	1.750
N° 6	1.725	NaN	8.275	1.750	2.000	2.125	1.725
N° 7(Off)	1.875	NaN	8.175	1.875	1.850	1.725	1.875
N° 8(Off)	1.525	NaN	8.400	1.725	2.125	2.050	1.525
N° 9(Off)	1.675	NaN	8.425	1.925	2.030	2.025	1.675
N° 10(Off)	1.725	NaN	8.125	1.975	1.900	2.125	1.725
N° 11(Off)	1.625	NaN	8.325	1.800	1.800	1.725	1.625

Delta [tPLHD, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	1.750E-1	-5.000E-2	2.500E-1	4.000E-1	0.000E+0
N° 2	---	NaN	6.600E+0	1.750E-1	2.750E-1	4.500E-1	0.000E+0
N° 3	---	NaN	6.400E+0	-1.750E-1	3.250E-1	4.000E-1	0.000E+0
N° 4	---	NaN	6.475E+0	7.500E-2	3.500E-1	3.000E-1	0.000E+0
N° 5	---	NaN	6.575E+0	5.000E-2	2.750E-1	3.250E-1	0.000E+0
N° 6	---	NaN	6.550E+0	2.500E-2	2.750E-1	4.000E-1	0.000E+0
N° 7(Off)	---	NaN	6.300E+0	0.000E+0	-2.500E-2	-1.500E-1	0.000E+0
N° 8(Off)	---	NaN	6.875E+0	2.000E-1	6.000E-1	5.250E-1	0.000E+0
N° 9(Off)	---	NaN	6.750E+0	2.500E-1	3.550E-1	3.500E-1	0.000E+0
N° 10(Off)	---	NaN	6.400E+0	2.500E-1	1.750E-1	4.000E-1	0.000E+0
N° 11(Off)	---	NaN	6.700E+0	1.750E-1	1.750E-1	1.000E-1	0.000E+0
Average	---	NaN	6.520E+0	3.000E-2	3.000E-1	3.750E-1	0.000E+0
s	---	0.000E+0	8.178E-2	1.280E-1	3.536E-2	6.124E-2	0.000E+0
Average+3s	---	NaN	6.765E+0	4.139E-1	4.061E-1	5.587E-1	0.000E+0
Average-3s	---	NaN	6.275E+0	-3.539E-1	1.939E-1	1.913E-1	0.000E+0

61. tPHLD, Module 1

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPHLD, Module 1 . (ns)

Min = 1.0 Max = 4.0

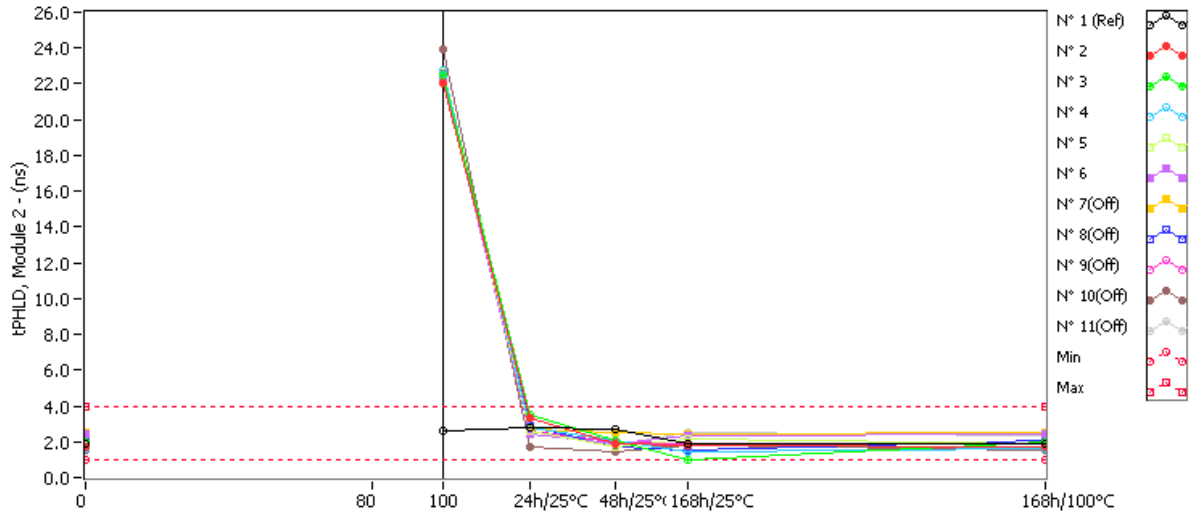
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	1.350	NaN	1.250	2.250	2.375	2.700	1.350
N° 2	2.475	NaN	23.506	2.925	2.925	2.700	2.475
N° 3	1.575	NaN	22.561	1.800	2.250	1.450	1.575
N° 4	2.475	NaN	26.541	2.925	2.250	1.800	2.475
N° 5	1.800	NaN	25.632	2.475	2.475	2.025	1.800
N° 6	2.700	NaN	26.599	2.475	2.475	2.475	2.700
N° 7(Off)	1.225	NaN	28.651	2.475	3.150	2.475	1.225
N° 8(Off)	1.350	NaN	23.231	2.475	2.025	2.700	1.350
N° 9(Off)	2.250	NaN	29.520	2.250	1.800	2.250	2.250
N° 10(Off)	2.700	NaN	21.390	2.025	1.575	2.475	2.700
N° 11(Off)	1.350	NaN	22.365	2.700	2.025	2.700	1.350

Delta [tPHLD, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.000E-1	9.000E-1	1.025E+0	1.350E+0	0.000E+0
N° 2	---	NaN	2.103E+1	4.500E-1	4.500E-1	2.250E-1	0.000E+0
N° 3	---	NaN	2.099E+1	2.250E-1	6.750E-1	-1.250E-1	0.000E+0
N° 4	---	NaN	2.407E+1	4.500E-1	-2.250E-1	-6.750E-1	0.000E+0
N° 5	---	NaN	2.383E+1	6.750E-1	6.750E-1	2.250E-1	0.000E+0
N° 6	---	NaN	2.390E+1	-2.250E-1	-2.250E-1	-2.250E-1	0.000E+0
N° 7(Off)	---	NaN	2.743E+1	1.250E+0	1.925E+0	1.250E+0	0.000E+0
N° 8(Off)	---	NaN	2.188E+1	1.125E+0	6.750E-1	1.350E+0	0.000E+0
N° 9(Off)	---	NaN	2.727E+1	0.000E+0	-4.500E-1	0.000E+0	0.000E+0
N° 10(Off)	---	NaN	1.869E+1	-6.750E-1	-1.125E+0	-2.250E-1	0.000E+0
N° 11(Off)	---	NaN	2.101E+1	1.350E+0	6.750E-1	1.350E+0	0.000E+0
Average	---	NaN	2.276E+1	3.150E-1	2.700E-1	-1.150E-1	0.000E+0
s	---	0.000E+0	1.604E+0	3.412E-1	4.611E-1	3.732E-1	0.000E+0
Average+3s	---	NaN	2.757E+1	1.339E+0	1.653E+0	1.004E+0	0.000E+0
Average-3s	---	NaN	1.795E+1	-7.087E-1	-1.113E+0	-1.234E+0	0.000E+0

62. tPHLD, Module 2

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPHLD, Module 2 . (ns)

Min = 1.0 Max = 4.0

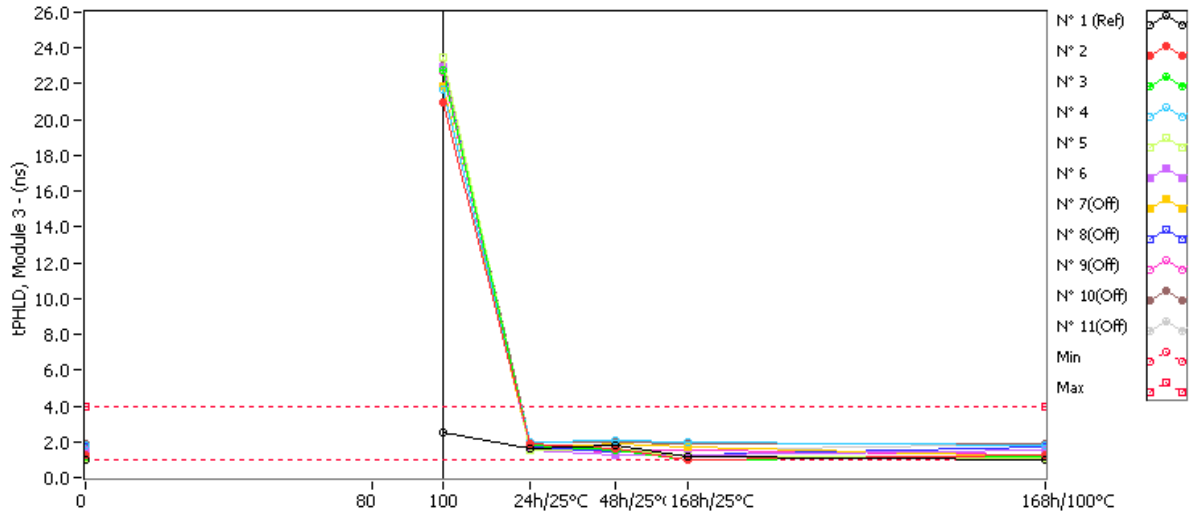
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	1.900	NaN	2.600	2.800	2.700	1.900	1.900
N° 2	1.700	NaN	22.000	3.300	1.900	1.800	1.700
N° 3	2.000	NaN	22.500	3.500	2.100	1.000	2.000
N° 4	1.600	NaN	22.800	2.800	2.100	1.400	1.600
N° 5	1.900	NaN	22.700	2.600	1.700	2.200	1.900
N° 6	2.400	NaN	22.300	2.400	1.900	2.300	2.400
N° 7(Off)	2.500	NaN	22.400	2.700	2.500	2.400	2.500
N° 8(Off)	2.100	NaN	22.700	2.900	1.700	1.500	2.100
N° 9(Off)	1.600	NaN	22.600	2.600	2.000	1.900	1.600
N° 10(Off)	1.500	NaN	23.900	1.700	1.400	1.800	1.500
N° 11(Off)	2.300	NaN	22.600	2.600	1.800	2.500	2.300

Delta [tPHLD, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	7.000E-1	9.000E-1	8.000E-1	0.000E+0	0.000E+0
N° 2	---	NaN	2.030E+1	1.600E+0	2.000E-1	1.000E-1	0.000E+0
N° 3	---	NaN	2.050E+1	1.500E+0	1.000E-1	-1.000E+0	0.000E+0
N° 4	---	NaN	2.120E+1	1.200E+0	5.000E-1	-2.000E-1	0.000E+0
N° 5	---	NaN	2.080E+1	7.000E-1	-2.000E-1	3.000E-1	0.000E+0
N° 6	---	NaN	1.990E+1	0.000E+0	-5.000E-1	-1.000E-1	0.000E+0
N° 7(Off)	---	NaN	1.990E+1	2.000E-1	0.000E+0	-1.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.060E+1	8.000E-1	-4.000E-1	-6.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.100E+1	1.000E+0	4.000E-1	3.000E-1	0.000E+0
N° 10(Off)	---	NaN	2.240E+1	2.000E-1	-1.000E-1	3.000E-1	0.000E+0
N° 11(Off)	---	NaN	2.030E+1	3.000E-1	-5.000E-1	2.000E-1	0.000E+0
Average	---	NaN	2.054E+1	1.000E+0	2.000E-2	-1.800E-1	0.000E+0
s	---	0.000E+0	4.930E-1	6.595E-1	3.834E-1	4.970E-1	0.000E+0
Average+3s	---	NaN	2.202E+1	2.979E+0	1.170E+0	1.311E+0	0.000E+0
Average-3s	---	NaN	1.906E+1	-9.786E-1	-1.130E+0	-1.671E+0	0.000E+0

63. tPHLD, Module 3

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPHLD, Module 3 . (ns)

Min = 1.0 Max = 4.0

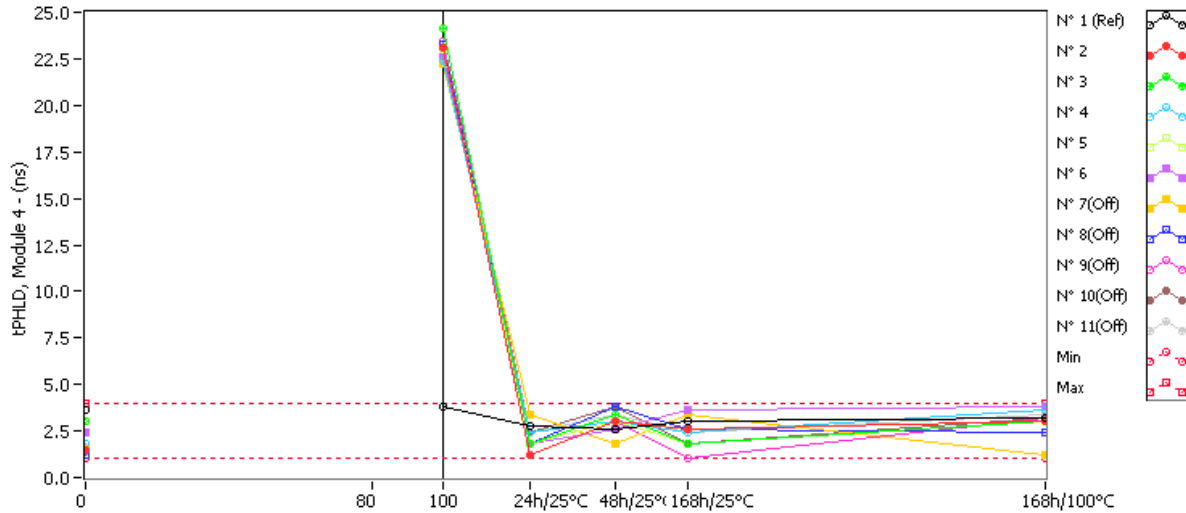
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	1.000	NaN	2.500	1.600	1.800	1.200	1.000
N° 2	1.300	NaN	21.000	1.900	1.600	1.000	1.300
N° 3	1.200	NaN	22.800	1.800	1.500	1.000	1.200
N° 4	1.800	NaN	21.700	2.000	2.100	2.000	1.800
N° 5	1.100	NaN	23.500	1.500	1.600	1.200	1.100
N° 6	1.500	NaN	22.900	1.500	1.300	1.300	1.500
N° 7(Off)	1.200	NaN	21.900	1.600	1.900	1.700	1.200
N° 8(Off)	1.700	NaN	22.900	1.700	1.400	1.300	1.700
N° 9(Off)	1.300	NaN	22.700	1.600	1.400	1.500	1.300
N° 10(Off)	1.900	NaN	23.000	2.000	2.000	1.900	1.900
N° 11(Off)	1.900	NaN	22.700	1.700	1.500	1.500	1.900

Delta [tPHLD, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	1.500E+0	6.000E-1	8.000E-1	2.000E-1	0.000E+0
N° 2	---	NaN	1.970E+1	6.000E-1	3.000E-1	-3.000E-1	0.000E+0
N° 3	---	NaN	2.160E+1	6.000E-1	3.000E-1	-2.000E-1	0.000E+0
N° 4	---	NaN	1.990E+1	2.000E-1	3.000E-1	2.000E-1	0.000E+0
N° 5	---	NaN	2.240E+1	4.000E-1	5.000E-1	1.000E-1	0.000E+0
N° 6	---	NaN	2.140E+1	0.000E+0	-2.000E-1	-2.000E-1	0.000E+0
N° 7(Off)	---	NaN	2.070E+1	4.000E-1	7.000E-1	5.000E-1	0.000E+0
N° 8(Off)	---	NaN	2.120E+1	0.000E+0	-3.000E-1	-4.000E-1	0.000E+0
N° 9(Off)	---	NaN	2.140E+1	3.000E-1	1.000E-1	2.000E-1	0.000E+0
N° 10(Off)	---	NaN	2.110E+1	1.000E-1	1.000E-1	0.000E+0	0.000E+0
N° 11(Off)	---	NaN	2.080E+1	-2.000E-1	-4.000E-1	-4.000E-1	0.000E+0
Average	---	NaN	2.100E+1	3.600E-1	2.400E-1	-8.000E-2	0.000E+0
s	---	0.000E+0	1.160E+0	2.608E-1	2.608E-1	2.168E-1	0.000E+0
Average+3s	---	NaN	2.448E+1	1.142E+0	1.022E+0	5.704E-1	0.000E+0
Average-3s	---	NaN	1.752E+1	-4.223E-1	-5.423E-1	-7.304E-1	0.000E+0

64. tPHLD, Module 4

"VID = 200mV ; input pulse = 1.1V to 1.3V ; Vin = 1.2V"



tPHLD, Module 4 . (ns)

Min = 1.0 Max = 4.0

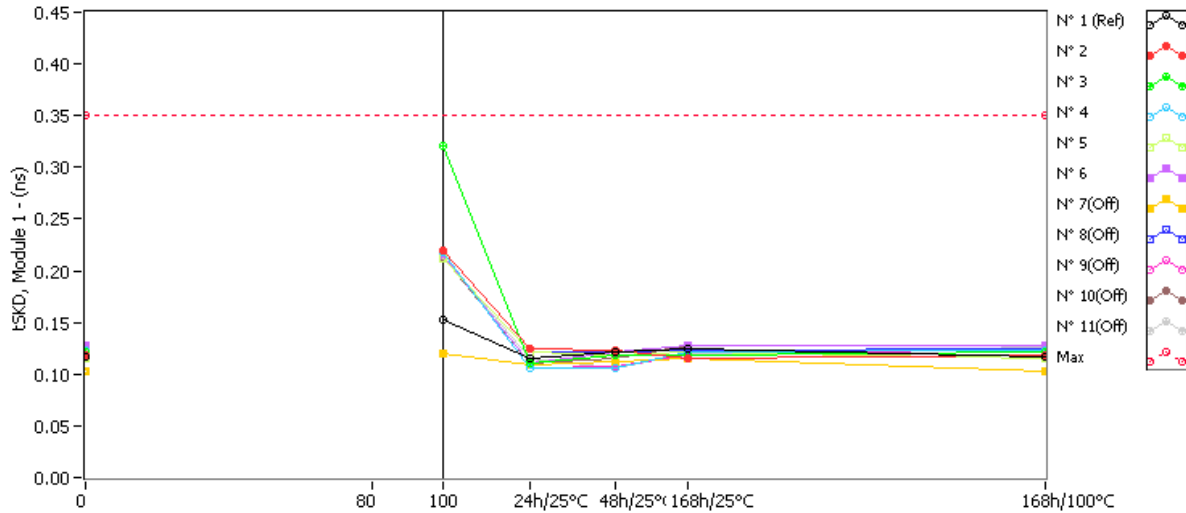
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	3.600	NaN	3.800	2.800	2.600	3.000	3.200
N° 2	1.500	NaN	23.100	1.200	3.000	2.600	3.000
N° 3	3.000	NaN	24.100	1.800	3.400	1.800	3.000
N° 4	1.800	NaN	22.400	2.400	3.000	2.400	3.600
N° 5	3.000	NaN	23.000	1.800	3.000	1.800	3.000
N° 6	2.400	NaN	22.700	1.800	2.600	3.600	3.800
N° 7(Off)	1.600	NaN	22.200	3.400	1.800	3.400	1.200
N° 8(Off)	1.200	NaN	23.300	1.800	3.800	2.600	2.400
N° 9(Off)	3.600	NaN	23.400	2.400	3.000	1.000	3.200
N° 10(Off)	1.600	NaN	22.900	2.400	3.800	1.800	3.200
N° 11(Off)	1.200	NaN	23.400	2.400	3.400	2.400	3.400

Delta [tPHLD, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	2.000E-1	-8.000E-1	-1.000E+0	-6.000E-1	-4.000E-1
N° 2	---	NaN	2.160E+1	-3.000E-1	1.500E+0	1.100E+0	1.500E+0
N° 3	---	NaN	2.110E+1	-1.200E+0	4.000E-1	-1.200E+0	0.000E+0
N° 4	---	NaN	2.060E+1	6.000E-1	1.200E+0	6.000E-1	1.800E+0
N° 5	---	NaN	2.000E+1	-1.200E+0	0.000E+0	-1.200E+0	0.000E+0
N° 6	---	NaN	2.030E+1	-6.000E-1	2.000E-1	1.200E+0	1.400E+0
N° 7(Off)	---	NaN	2.060E+1	1.800E+0	2.000E-1	1.800E+0	-4.000E-1
N° 8(Off)	---	NaN	2.210E+1	6.000E-1	2.600E+0	1.400E+0	1.200E+0
N° 9(Off)	---	NaN	1.980E+1	-1.200E+0	-6.000E-1	-2.600E+0	-4.000E-1
N° 10(Off)	---	NaN	2.130E+1	8.000E-1	2.200E+0	2.000E-1	1.600E+0
N° 11(Off)	---	NaN	2.220E+1	1.200E+0	2.200E+0	1.200E+0	2.200E+0
Average	---	NaN	2.072E+1	-5.400E-1	6.600E-1	1.000E-1	9.400E-1
s	---	0.000E+0	6.380E-1	7.470E-1	6.542E-1	1.208E+0	8.706E-1
Average+3s	---	NaN	2.263E+1	1.701E+0	2.623E+0	3.725E+0	3.552E+0
Average-3s	---	NaN	1.881E+1	-2.781E+0	-1.303E+0	-3.525E+0	-1.672E+0

65. tSKD, Module 1

"VID = 200mV"



tSKD, Module 1 . (ns)

Max = 0.35

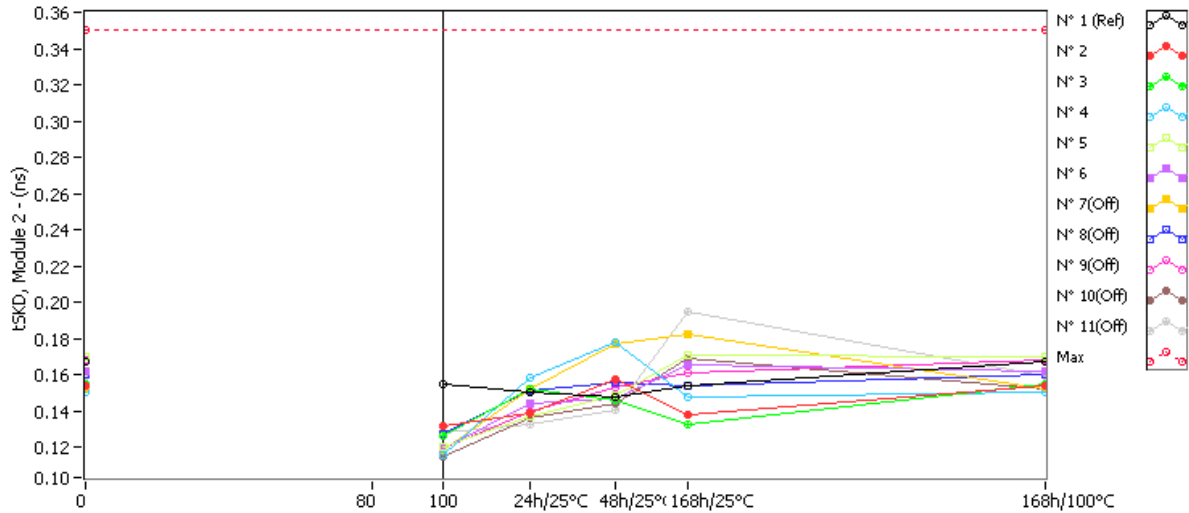
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.117	NaN	0.153	0.116	0.122	0.125	0.117
N° 2	0.118	NaN	0.220	0.124	0.123	0.115	0.118
N° 3	0.122	NaN	0.320	0.111	0.118	0.119	0.122
N° 4	0.123	NaN	0.219	0.106	0.106	0.121	0.123
N° 5	0.115	NaN	0.212	0.122	0.119	0.122	0.115
N° 6	0.127	NaN	0.214	0.111	0.122	0.127	0.127
N° 7(Off)	0.103	NaN	0.121	0.109	0.112	0.116	0.103
N° 8(Off)	0.124	NaN	0.212	0.122	0.121	0.123	0.124
N° 9(Off)	0.124	NaN	0.218	0.106	0.108	0.118	0.124
N° 10(Off)	0.128	NaN	0.214	0.110	0.116	0.128	0.128
N° 11(Off)	0.126	NaN	0.214	0.116	0.106	0.120	0.126

Delta [tSKD, Module 1]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	3.600E-2	-1.000E-3	5.000E-3	8.000E-3	0.000E+0
N° 2	---	NaN	1.020E-1	6.000E-3	5.000E-3	-3.000E-3	0.000E+0
N° 3	---	NaN	1.980E-1	-1.100E-2	-4.000E-3	-3.000E-3	0.000E+0
N° 4	---	NaN	9.600E-2	-1.700E-2	-1.700E-2	-2.000E-3	0.000E+0
N° 5	---	NaN	9.700E-2	7.000E-3	4.000E-3	7.000E-3	0.000E+0
N° 6	---	NaN	8.700E-2	-1.600E-2	-5.000E-3	0.000E+0	0.000E+0
N° 7(Off)	---	NaN	1.800E-2	6.000E-3	9.000E-3	1.300E-2	0.000E+0
N° 8(Off)	---	NaN	8.800E-2	-2.000E-3	-3.000E-3	-1.000E-3	0.000E+0
N° 9(Off)	---	NaN	9.400E-2	-1.800E-2	-1.600E-2	-6.000E-3	0.000E+0
N° 10(Off)	---	NaN	8.600E-2	-1.800E-2	-1.200E-2	0.000E+0	0.000E+0
N° 11(Off)	---	NaN	8.800E-2	-1.000E-2	-2.000E-2	-6.000E-3	0.000E+0
Average	---	NaN	1.160E-1	-6.200E-3	-3.400E-3	-2.000E-4	0.000E+0
s	---	0.000E+0	4.616E-2	1.182E-2	8.849E-3	4.207E-3	0.000E+0
Average+3s	---	NaN	2.545E-1	2.926E-2	2.315E-2	1.242E-2	0.000E+0
Average-3s	---	NaN	-2.247E-2	-4.166E-2	-2.995E-2	-1.282E-2	0.000E+0

66. tSKD, Module 2

"VID = 200mV"



tSKD, Module 2 . (ns)

Max = 0.35

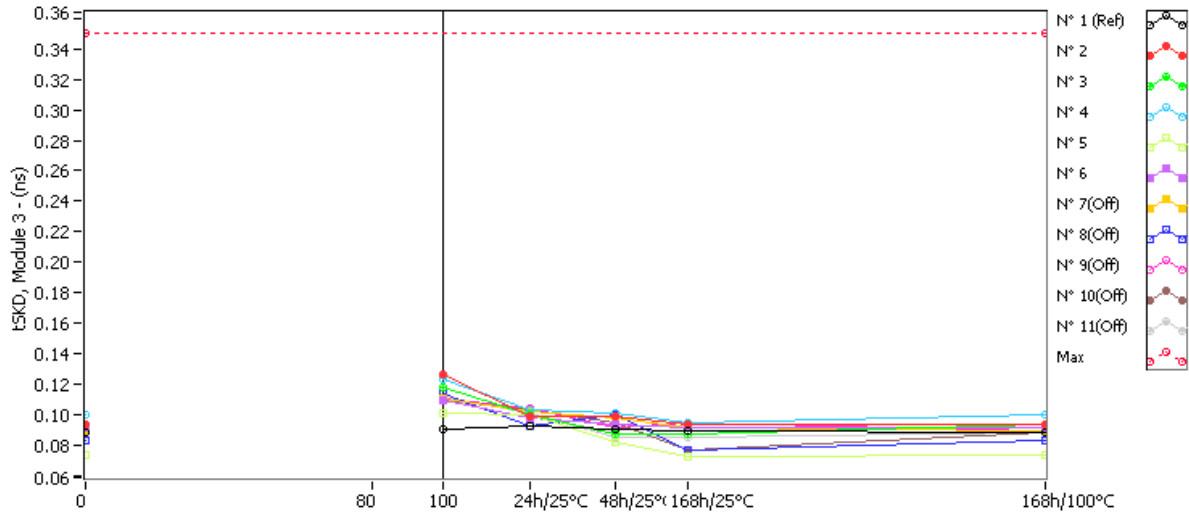
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.167	NaN	0.155	0.150	0.148	0.154	0.167
N° 2	0.154	NaN	0.132	0.139	0.157	0.138	0.154
N° 3	0.155	NaN	0.126	0.152	0.146	0.133	0.155
N° 4	0.150	NaN	0.116	0.158	0.178	0.148	0.150
N° 5	0.170	NaN	0.120	0.137	0.149	0.171	0.170
N° 6	0.162	NaN	0.119	0.144	0.147	0.165	0.162
N° 7(Off)	0.152	NaN	0.118	0.152	0.177	0.182	0.152
N° 8(Off)	0.160	NaN	0.127	0.151	0.156	0.154	0.160
N° 9(Off)	0.168	NaN	0.119	0.140	0.153	0.161	0.168
N° 10(Off)	0.152	NaN	0.115	0.136	0.144	0.169	0.152
N° 11(Off)	0.159	NaN	0.128	0.133	0.141	0.195	0.159

Delta [tSKD, Module 2]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	-1.200E-2	-1.700E-2	-1.900E-2	-1.300E-2	0.000E+0
N° 2	---	NaN	-2.200E-2	-1.500E-2	3.000E-3	-1.600E-2	0.000E+0
N° 3	---	NaN	-2.900E-2	-3.000E-3	-9.000E-3	-2.200E-2	0.000E+0
N° 4	---	NaN	-3.400E-2	8.000E-3	2.800E-2	-2.000E-3	0.000E+0
N° 5	---	NaN	-5.000E-2	-3.300E-2	-2.100E-2	1.000E-3	0.000E+0
N° 6	---	NaN	-4.300E-2	-1.800E-2	-1.500E-2	3.000E-3	0.000E+0
N° 7(Off)	---	NaN	-3.400E-2	0.000E+0	2.500E-2	3.000E-2	0.000E+0
N° 8(Off)	---	NaN	-3.300E-2	-9.000E-3	-4.000E-3	-6.000E-3	0.000E+0
N° 9(Off)	---	NaN	-4.900E-2	-2.800E-2	-1.500E-2	-7.000E-3	0.000E+0
N° 10(Off)	---	NaN	-3.700E-2	-1.600E-2	-8.000E-3	1.700E-2	0.000E+0
N° 11(Off)	---	NaN	-3.100E-2	-2.600E-2	-1.800E-2	3.600E-2	0.000E+0
Average	---	NaN	-3.560E-2	-1.220E-2	-2.800E-3	-7.200E-3	0.000E+0
s	---	0.000E+0	1.110E-2	1.555E-2	1.937E-2	1.112E-2	0.000E+0
Average+3s	---	NaN	-2.288E-3	3.444E-2	5.531E-2	2.617E-2	0.000E+0
Average-3s	---	NaN	-6.891E-2	-5.884E-2	-6.091E-2	-4.057E-2	0.000E+0

67. tSKD, Module 3

"VID = 200mV"



tSKD, Module 3 . (ns)

Max = 0.35

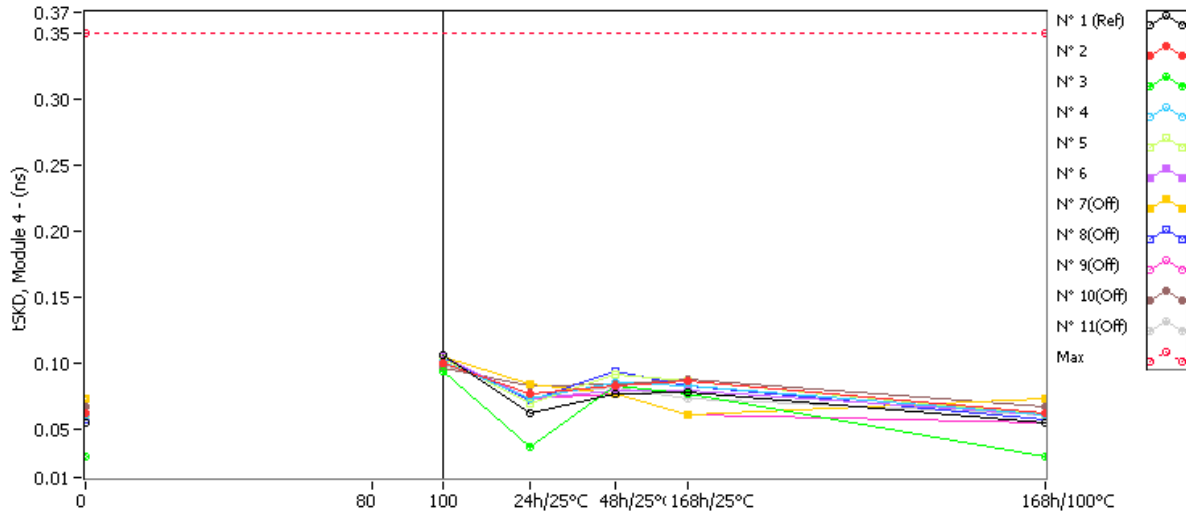
	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.089	NaN	0.091	0.093	0.091	0.090	0.089
N° 2	0.094	NaN	0.127	0.099	0.099	0.094	0.094
N° 3	0.094	NaN	0.118	0.100	0.088	0.088	0.094
N° 4	0.100	NaN	0.123	0.103	0.101	0.095	0.100
N° 5	0.074	NaN	0.101	0.100	0.082	0.073	0.074
N° 6	0.092	NaN	0.110	0.098	0.094	0.092	0.092
N° 7(Off)	0.090	NaN	0.111	0.102	0.098	0.092	0.090
N° 8(Off)	0.083	NaN	0.114	0.093	0.100	0.077	0.083
N° 9(Off)	0.090	NaN	0.111	0.104	0.092	0.095	0.090
N° 10(Off)	0.089	NaN	0.110	0.103	0.095	0.077	0.089
N° 11(Off)	0.089	NaN	0.112	0.101	0.086	0.085	0.089

Delta [tSKD, Module 3]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	2.000E-3	4.000E-3	2.000E-3	1.000E-3	0.000E+0
N° 2	---	NaN	3.300E-2	5.000E-3	5.000E-3	0.000E+0	0.000E+0
N° 3	---	NaN	2.400E-2	6.000E-3	-6.000E-3	-6.000E-3	0.000E+0
N° 4	---	NaN	2.300E-2	3.000E-3	1.000E-3	-5.000E-3	0.000E+0
N° 5	---	NaN	2.700E-2	2.600E-2	8.000E-3	-1.000E-3	0.000E+0
N° 6	---	NaN	1.800E-2	6.000E-3	2.000E-3	0.000E+0	0.000E+0
N° 7(Off)	---	NaN	2.100E-2	1.200E-2	8.000E-3	2.000E-3	0.000E+0
N° 8(Off)	---	NaN	3.100E-2	1.000E-2	1.700E-2	-6.000E-3	0.000E+0
N° 9(Off)	---	NaN	2.100E-2	1.400E-2	2.000E-3	5.000E-3	0.000E+0
N° 10(Off)	---	NaN	2.100E-2	1.400E-2	6.000E-3	-1.200E-2	0.000E+0
N° 11(Off)	---	NaN	2.300E-2	1.200E-2	-3.000E-3	-4.000E-3	0.000E+0
Average	---	NaN	2.500E-2	9.200E-3	2.000E-3	-2.400E-3	0.000E+0
s	---	0.000E+0	5.523E-3	9.471E-3	5.244E-3	2.881E-3	0.000E+0
Average+3s	---	NaN	4.157E-2	3.761E-2	1.773E-2	6.243E-3	0.000E+0
Average-3s	---	NaN	8.432E-3	-1.921E-2	-1.373E-2	-1.104E-2	0.000E+0

68. tSKD, Module 4

"VID = 200mV"



tSKD, Module 4 . (ns)

Max = 0.35

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	0.055	NaN	0.106	0.062	0.076	0.078	0.055
N° 2	0.062	NaN	0.100	0.076	0.083	0.086	0.062
N° 3	0.029	NaN	0.094	0.036	0.083	0.077	0.029
N° 4	0.060	NaN	0.101	0.073	0.085	0.082	0.060
N° 5	0.060	NaN	0.103	0.069	0.091	0.086	0.060
N° 6	0.061	NaN	0.104	0.073	0.079	0.079	0.061
N° 7(Off)	0.073	NaN	0.105	0.084	0.077	0.060	0.073
N° 8(Off)	0.057	NaN	0.103	0.072	0.093	0.083	0.057
N° 9(Off)	0.055	NaN	0.103	0.073	0.076	0.061	0.055
N° 10(Off)	0.067	NaN	0.096	0.083	0.084	0.088	0.067
N° 11(Off)	0.061	NaN	0.099	0.076	0.081	0.073	0.061

Delta [tSKD, Module 4]

	0krad(Si)	80krad(Si)	100krad(Si)	24h/25°C	48h/25°C	168h/25°C	168h/100°C
N° 1 (Ref)	---	NaN	5.100E-2	7.000E-3	2.100E-2	2.300E-2	0.000E+0
N° 2	---	NaN	3.800E-2	1.400E-2	2.100E-2	2.400E-2	0.000E+0
N° 3	---	NaN	6.500E-2	7.000E-3	5.400E-2	4.800E-2	0.000E+0
N° 4	---	NaN	4.100E-2	1.300E-2	2.500E-2	2.200E-2	0.000E+0
N° 5	---	NaN	4.300E-2	9.000E-3	3.100E-2	2.600E-2	0.000E+0
N° 6	---	NaN	4.300E-2	1.200E-2	1.800E-2	1.800E-2	0.000E+0
N° 7(Off)	---	NaN	3.200E-2	1.100E-2	4.000E-3	-1.300E-2	0.000E+0
N° 8(Off)	---	NaN	4.600E-2	1.500E-2	3.600E-2	2.600E-2	0.000E+0
N° 9(Off)	---	NaN	4.800E-2	1.800E-2	2.100E-2	6.000E-3	0.000E+0
N° 10(Off)	---	NaN	2.900E-2	1.600E-2	1.700E-2	2.100E-2	0.000E+0
N° 11(Off)	---	NaN	3.800E-2	1.500E-2	2.000E-2	1.200E-2	0.000E+0
Average	---	NaN	4.600E-2	1.100E-2	2.980E-2	2.760E-2	0.000E+0
s	---	0.000E+0	1.082E-2	2.915E-3	1.438E-2	1.178E-2	0.000E+0
Average+3s	---	NaN	7.845E-2	1.975E-2	7.293E-2	6.294E-2	0.000E+0
Average-3s	---	NaN	1.355E-2	2.254E-3	-1.333E-2	-7.744E-3	0.000E+0