



RADIATION TEST SUMMARY

PART TYPE : 2N6796

DESCRIPTION : N-CHANNEL MOSFET

REPORT NO. : RD176

PARAMETERS PLOTTED :

V_{gs(th)}
I_{DSS}
V(BR)_{DSS}

NOTE :

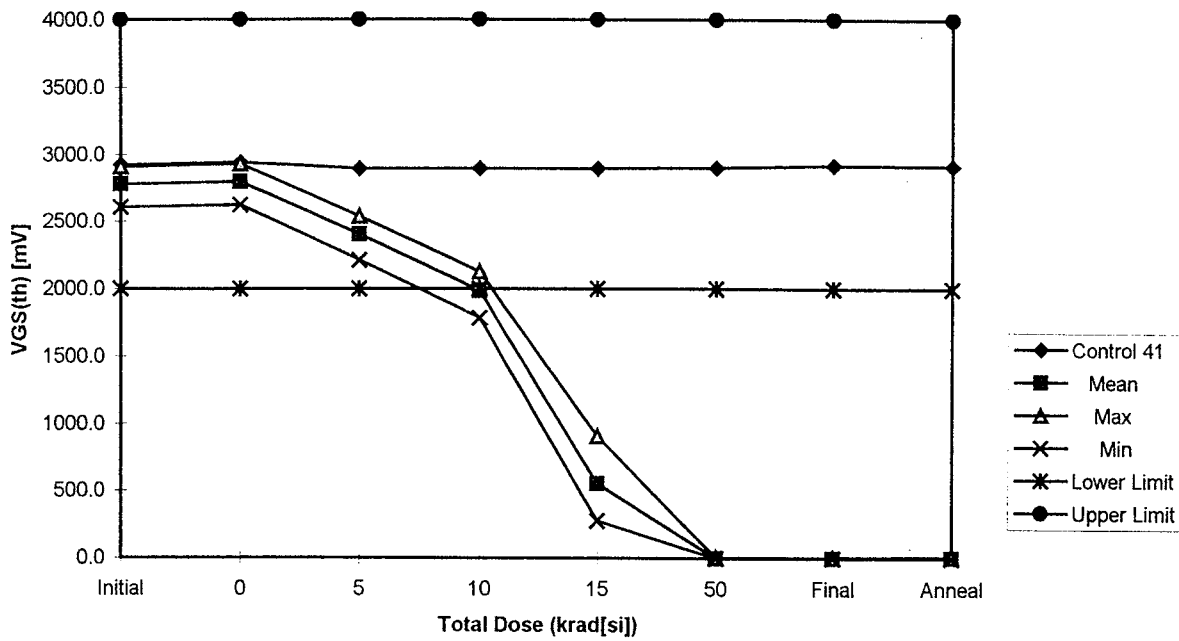
The results for I_{gss} and RDS(on) showed no significant change and hence plots were not considered necessary

The results for electrical measurements after 20Krad were lost due to a disk error and therefore have not been plotted

Specification PO-PL-IGG-PL-0006, Appendix 1



Radiation Results for 2N6796

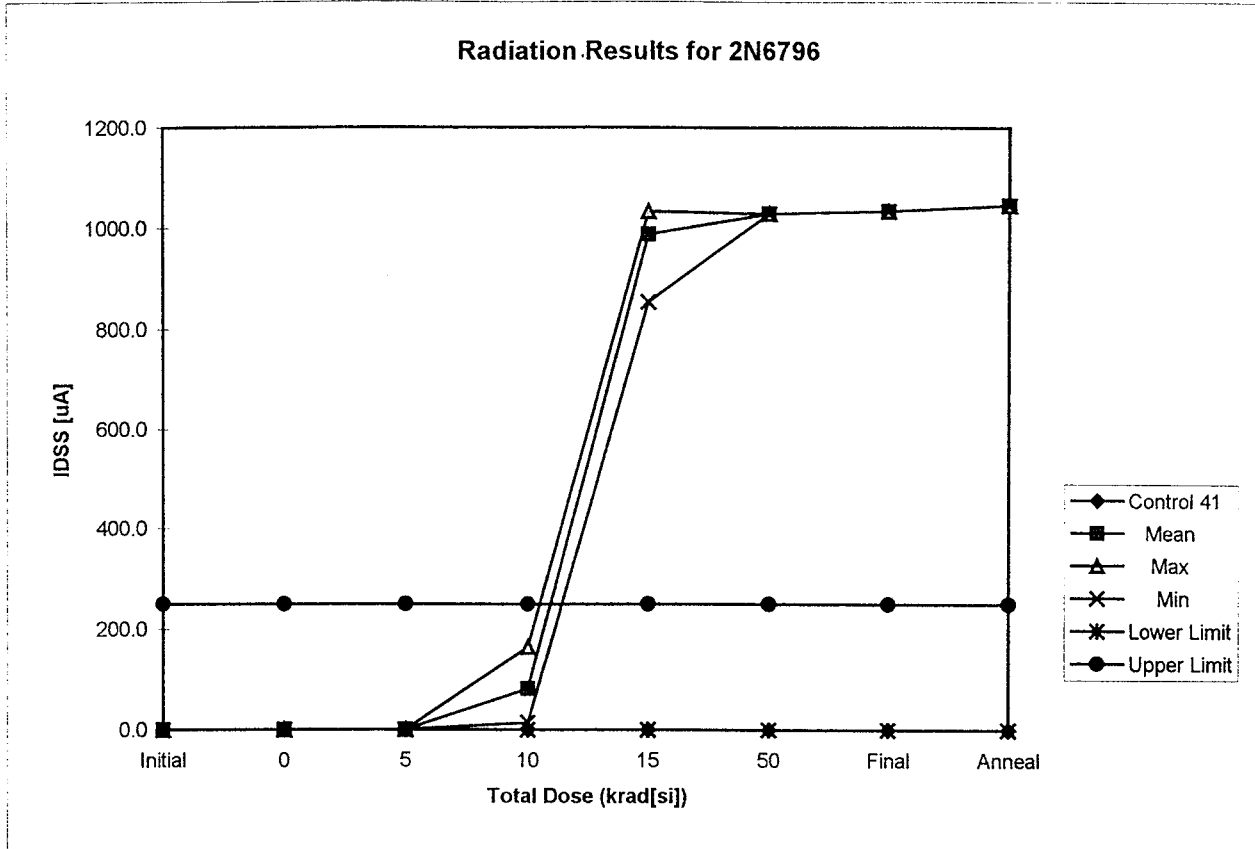


Dose (kRad)	Control 41 (mV)	Mean (mV)	Max (mV)	Min (mV)	Lower Limit (mV)	Upper Limit (mV)	Std.Dev.
Initial	2920.0	2776.6	2906.3	2604.6	2000	4000	132.57
0	2935.7	2792.3	2923.7	2618.6	2000	4000	133.49
5	2890.1	2401.9	2536.6	2211.5	2000	4000	142.31
10	2889.8	1984.5	2125.4	1786.4	2000	4000	153.78
15	2886.5	551.7	908.1	277.4	2000	4000	270.56
50	2893.1	1.9	3.2	0.6	2000	4000	1.10
Final	2910.4	1.1	3.5	0.1	2000	4000	1.60
Anneal	2908.7	5.3	9.9	1.6	2000	4000	3.46

The results for electrical measurements after 20Krad were lost due to a disk error and therefore have not been plotted.

Lot size for statistics : 4 devices

RD 176 Date Code: 9248B



Dose (kRad)	Control 41 (uA)	Mean (uA)	Max (uA)	Min (uA)	Lower Limit (uA)	Upper Limit (uA)	Std.Dev.
Initial	0.0	0.0	0.0	0.0	0.0	250.0	0.0
0	0.0	0.0	0.0	0.0	0.0	250.0	0.0
5	0.0	0.0	0.0	0.0	0.0	250.0	0.0
10	0.0	82.3	164.0	14.0	0.0	250.0	63.6
15	0.0	987.5	1033.0	852.0	0.0	250.0	90.3
50	0.0	1028.0	1028.0	1028.0	0.0	250.0	0.0
Final	0.0	1033.0	1033.0	1033.0	0.0	250.0	0.0
Anneal	0.0	1046.0	1046.0	1046.0	0.0	250.0	0.0

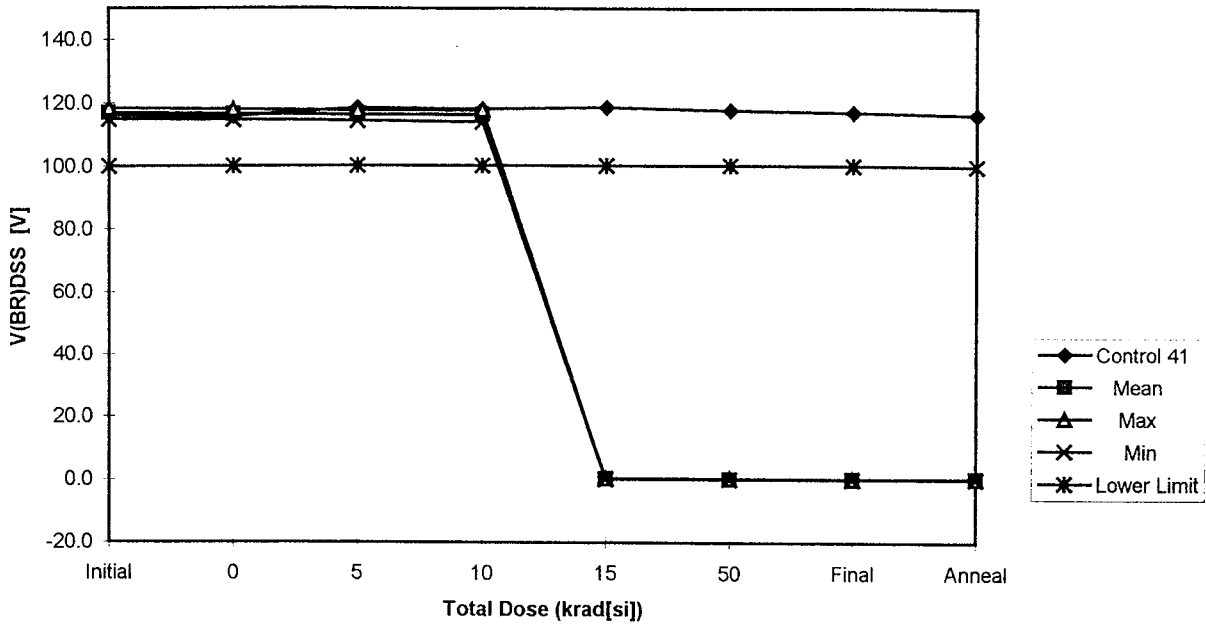
The results for electrical measurements after 20Krad were lost due to a disk error and therefore have not been plotted.

Lot size for statistics : 4 devices

RD 176 Date Code: 9248B



Radiation Results for 2N6796



Dose (kRad)	Control 41 (V)	Mean (V)	Max (V)	Min (V)	Lower Limit (V)	Std.Dev.
Initial	116.0	116.8	118.2	114.8	100.0	1.5
0	115.7	116.5	117.8	114.6	100.0	1.4
5	118.3	116.0	117.5	114.3	100.0	1.3
10	117.8	116.2	117.7	113.8	100.0	1.7
15	118.4	0.3	0.4	0.2	100.0	0.1
50	117.5	0.2	0.3	0.1	100.0	0.1
Final	116.8	0.2	0.2	0.2	100.0	0.0
Anneal	116.3	0.3	0.4	0.2	100.0	0.1

The results for electrical measurements after 20Krad were lost due to a disk error and therefore have not been plotted.

Lot size for statistics : 4 devices

RD 176 Date Code: 9248B

Pin assignment : 1

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=====
1. IGSS (FWD)      ( 0.0 )... 100.0 nA
Switch : off      | Pin assignment : 1
VGS      20.000 V | Add. time      0 ms |
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2. IDSS            ( 0 )... 250 uA
Switch : off      | Pin assignment : 1
VDS     100.000 V | Add. time      0 ms |
-----
3. RDS on          ( 0.000)... 0.180 Ohm
Switch : off      | Pin assignment : 1
VGS     10.000 V | ID      5000.000 mA |
-----
4. VGS             2000.0 ... 4000.0 mV
Switch : off      | Pin assignment : 1
ID      1.000 mA |
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Results file : 2N6796_RD176_INIT_EMS @_IGG from: 11.03.70 / 23:41:19
Operator : Steve Young.
Part number : 2N6796.
Lot number : RIR 64017.
Order number : Date Code 9248B.
Vendor : IR.
: 4 PARTS S/No's 42,43,44,45 + 1 CONTROL S/No 41
: TEST #3 INITIAL EMS @ IGG.
: 2N6796 PO-PL-IGG-PL-0006 ISS 3 / 1.1 SMR 11/12/95

Test steps

1. V(BR)DSS	100.0	...	700.0	V
2. VGS	2000.0	...	4000.0	mV
3. IGSS (FWD)	(0.0)...		100.0	nA
4. IDSS	(0)...		250	uA
5. RDS on	(0.000)...		0.180	Ohm

	41	42	43	44	45
1.1 [V]	116.0	116.8	117.4	118.2	114.8
2.1 [mV]	2817.9	2745.6	2849.8	2906.3	2604.6
3.1 [nA]	1.0	1.0	1.1	1.1	1.0
4.1 [uA]	0	0	0	0	0
5.1 [Ohm]	0.130	0.135	0.137	0.140	0.136

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=====
Results file   : 2N6796_RD176_INIT_EMS@_ERA   from: 13.03.70 / 20:51:45
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : RIR 64017.
Order number  : Date Code 9248B.
Vendor       : IR.
              : 4 PARTS S/No's 42,43,44,45 + 1 CONTROL S/No 41
              : TEST #4 INITIAL EMS @ ERA.
              : 2N6796 PO-PL-IGG-PL-0006 ISS 3 / 1.1 SMR 11/12/95
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Test steps

1.	V(BR)DSS	100.0	...	700.0	V
2.	VGS	2000.0	...	4000.0	mV
3.	IGSS (FWD)	(0.0)	...	100.0	nA
4.	IDSS	(0)	...	250	uA
5.	RDS on	(0.000)	...	0.180	Ohm


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=====
Results file   : 2N6796_RD176_EMS@_5_KRADS   from: 13.03.70 / 21:05:41
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : RIR 64017.
Order number  : Date Code 9248B.
Vendor       : IR.
              : 4 PARTS S/No's 42,43,44,45 + 1 CONTROL S/No 41
              : TEST #7 EMS @ 5 KRADs.
              : 2N6796 PO-PL-IGG-PL-0006 ISS 3 / 1.1 SMR 11/12/95
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Test steps

1.	V(BR)DSS	100.0	...	700.0	V
2.	VGS	2000.0	...	4000.0	mV
3.	IGSS (FWD)	(0.0)	...	100.0	nA
4.	IDSS	(0)	...	250	uA
5.	RDS on	(0.000)	...	0.180	Ohm

	41	42	43	44	45
1.1 [V]	118.3	115.8	116.5	117.5	114.3
2.1 [mV]	2722.1	2380.8	2478.8	2536.6	2211.5
3.1 [nA]	1.0	1.0	1.0	1.0	1.0
4.1 [uA]	0	0	0	0	0
5.1 [Ohm]	0.149	0.143	0.130	0.132	0.129

SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F
RD176_2N6796_INIT_EMS@_IG6 / 1.1 SMR 11/12/95

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=====
Results file   : 2N6796_RD176_EMS@_10_KRADS   from: 13.03.70 / 21:31:38
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : RIR 64017.
Order number  : Date Code 9248B.
Vendor       : IR.
              : 4 PARTS S/No's 42,43,44,45 + 1 CONTROL S/No 41
              : TEST #13 EMS @ 10 KRADs.
              : 2N6796 PO-PL-IG6-PL-0006 ISS 3 / 1.1 SMR 11/12/95
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Test steps

1.	V(BR)DSS	100.0	...	700.0	V
2.	VGS	2000.0	...	4000.0	mV
3.	IGSS (FWD)	(0.0)	...	100.0	nA
4.	IDSS	(0)	...	250	uA
5.	RDS on	(0.000)	...	0.180	Ohm

	41	42	43	44	45
1.1 [V]	117.8	116.3	116.8	117.7	113.8
2.1 [mV]	2731.2	1941.5	2084.5	2125.4	1786.4
3.1 [nA]	1.5	1.5	1.5	1.5	1.5
4.1 [uA]	0	164	14	57	94
5.1 [Ohm]	0.148	0.136	0.133	0.135	0.131

=====
Results file : 2N6796_RD176_EMS_@_15_KRADS from: 13.03.70 / 22:01:27
Operator : Steve Young.
Part number : 2N6796.
Lot number : RIR 64017.
Order number : Date Code 9248B.
Vendor : IR.
: 4 PARTS S/No's 42,43,44,45 + 1 CONTROL S/No 41
: TEST #16 EMS @ 15 KRADs.
: 2N6796 PO-PL-IGG-PL-0006 ISS 3 / 1.1 SMR 11/12/95
=====

Test steps

1.	V(BR)DSS	100.0	...	700.0	V
2.	VGS	2000.0	...	4000.0	mV
3.	IGSS (FWD)	(0.0)	...	100.0	nA
4.	IDSS	(0)	...	250	uA
5.	RDS on	(0.000)	...	0.180	Ohm

	41	42	43	44	45
1.1 [V]	118.4	0.4 F	0.2 F	0.2 F	0.2 F
2.1 [mV]	2712.1	427.0 F	908.1 F	594.1 F	277.4 F
3.1 [nA]	1.7	1.6	1.6	1.6	1.6
4.1 [uA]	0	1033 F	852 F	1032 F	1033 F
5.1 [Ohm]	0.155	0.136	0.131	0.134	0.128

=====
Results file : 2N6796_RD176_EMS@_50_KRADS from: 14.03.70 / 01:20:49
Operator : Steve Young.
Part number : 2N6796.
Lot number : RIR 64017.
Order number : Date Code 9248B.
Vendor : IR.
: 4 PARTS S/No's 42,43,44,45 + 1 CONTROL S/No 41
: TEST #22 EMS @ 50 KRADS.
: 2N6796 PO-PL-IG6-PL-0006 ISS 3 / 1.1 SMR 11/12/95
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Test steps

1.	V(BR)DSS	100.0	...	700.0	V
2.	VGS	2000.0	...	4000.0	mV
3.	IGSS (FWD)	(0.0)	...	100.0	nA
4.	IDSS	(0)	...	250	uA
5.	RDS on	(0.000)	...	0.180	Ohm

	41	42	43	44	45
1.1 [V]	117.5	0.3 F	0.1 F	0.3 F	0.1 F
2.1 [mV]	2771.2	2.3 F	0.6 F	3.2 F	1.6 F
3.1 [nA]	1.7	1.6	1.6	1.6	1.6
4.1 [uA]	0	1028 F	1028 F	1028 F	1028 F
5.1 [Ohm]	0.142	0.128	0.133	0.140	0.132