



# RADIATION TEST SUMMARY

PART TYPE : 2N6796

DESCRIPTION : N-CHANNEL MOSFET

REPORT NO. : RD165

PARAMETERS PLOTTED :

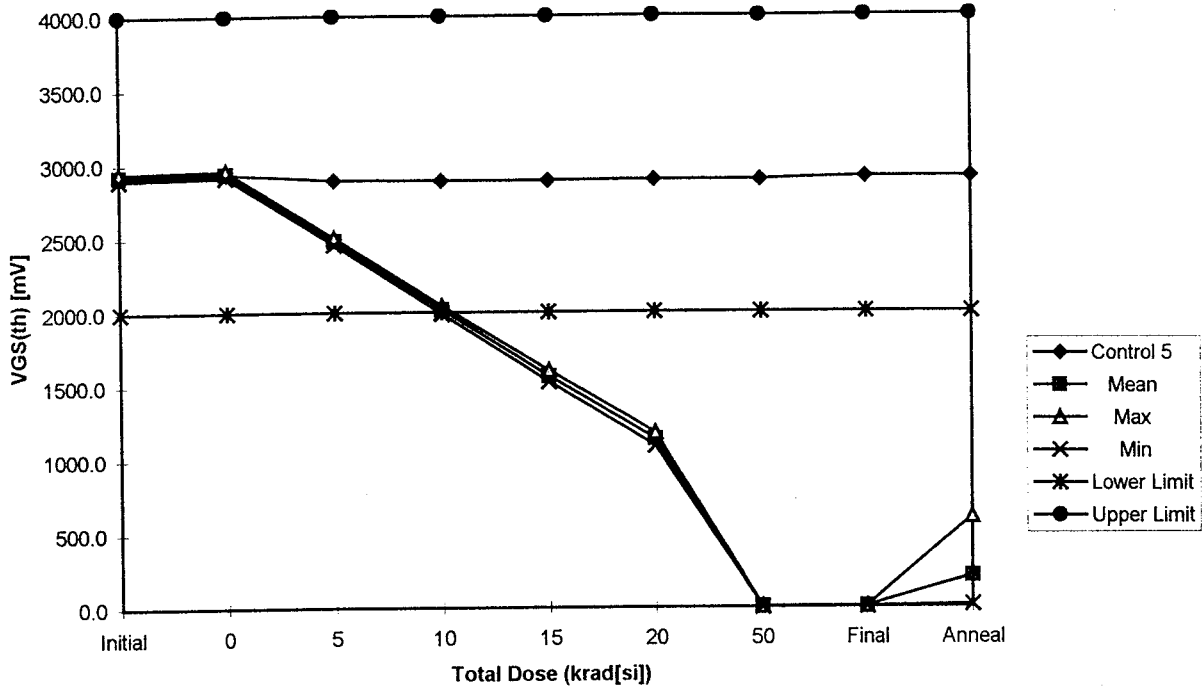
Vgs(th)  
IDSS

NOTE :

The results for V(BR)DSS, IGSS and RDS(on) showed no significant change and hence plots were not considered necessary



Radiation Results for 2N6796



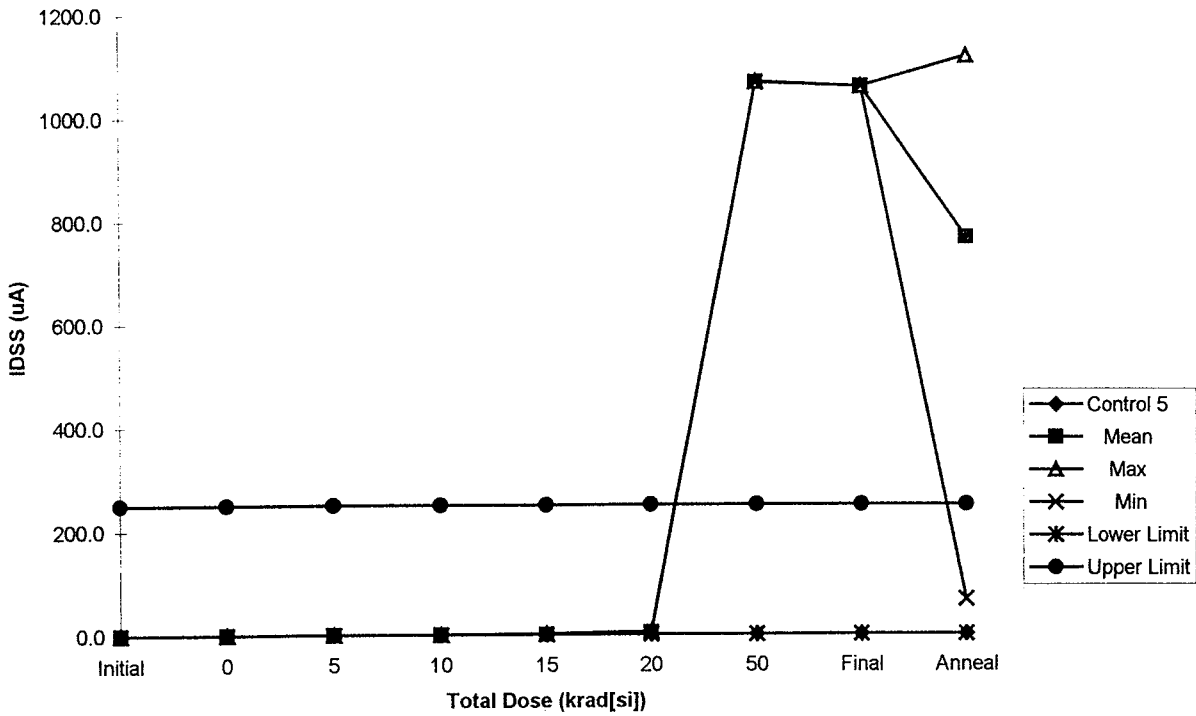
Dose (kRad)	Control 5 (mV)	Mean (mV)	Max (mV)	Min (mV)	Lower Limit (mV)	Upper Limit (mV)	Std.Dev.
Initial	2920.0	2923.6	2943.3	2897.8	2000	4000	19.78
0	2935.7	2941.4	2961.4	2913.1	2000	4000	20.53
5	2890.1	2480.8	2502.2	2457.6	2000	4000	20.40
10	2889.8	2015.4	2041.8	1985.4	2000	4000	29.23
15	2886.5	1565.5	1601.6	1524.7	2000	4000	38.13
20	2891.9	1139.4	1181.7	1091.1	2000	4000	42.17
50	2893.1	3.0	4.0	1.6	2000	4000	1.02
Final	2910.4	3.3	4.8	0.3	2000	4000	2.01
Anneal	2908.7	205.1	608.4	11.8	2000	4000	275.39

Lot size for statistics : 4 devices

RD 165 Date Code: 9527A



Radiation Results for 2N6796



Dose (kRad	Control 5	Mean	Max	Min	Lower Limit	Upper Limit	Std.Dev.
	(uA)	(uA)	(uA)	(uA)	(uA)	(uA)	
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	0.0	0.0	0.0	0.0	250.0	0.0
15	0.0	0.3	1.0	0.0	0.0	250.0	0.5
20	0.0	3.5	6.0	2.0	0.0	250.0	1.7
50	0.0	1064.5	1065.0	1064.0	0.0	250.0	0.6
Final	0.0	1055.0	1055.0	1055.0	0.0	250.0	0.0
Anneal	0.0	764.8	1113.0	67.0	0.0	250.0	492.9

Lot size for statistics: 4 devices

RD 165 Date Code: 9527A

RD165

SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
/N6796\_63664\_RAD\_TEST / 1.1 SMR 11/12/95

=====  
Results file : RAD\_TEST\_63664\_INIT\_EMS @\_IG6 from: 12.02.70 / 05:11:24  
Operator : Steve Young.  
Part number : 2N6796.  
Lot number : Date Code 9527A.  
Order number : RIR 63664  
Vendor : IR.  
: 4 pcs S/No's 06,07,08,09 + 1 control S/No 05.  
: TEST #3 INITIAL EMS @ IGG  
: 2N6796 PO-PL-IG6-PL-0006 ISS 3 / 1.1 SMR 11/12/95.  
=====

Test steps

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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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	5	6	7	8	9
1.1 [ V ]	119.0	119.9	119.8	119.2	119.0
2.1 [ mV ]	2920.0	2933.8	2897.8	2943.3	2919.6
3.1 [ nA ]	1.1	1.1	1.1	1.1	1.1
4.1 [ uA ]	0	0	0	0	0
5.1 [ Ohm ]	0.147	0.144	0.143	0.146	0.151

	5	6	7	8	9
1.1 [ V ]	118.7	119.5	119.5	118.5	118.6
2.1 [mV]	2935.7	2949.4	2913.1	2961.4	2941.6
3.1 [nA]	1.0	1.0	1.0	1.0	1.0
4.1 [uA]	0	0	0	0	0
5.1 [Ohm]	0.140	0.141	0.143	0.144	0.145

SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
/N6796\_63664\_RAD\_TEST / 1.1 SMR 11/12/95

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=====
Results file   : RAD_TEST_63664_EMS@_5_KRAD   from: 13.02.70 / 01:56:12
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : Date Code 9527A.
Order number  : RIR 63664
Vendor        : IR.
               : 4 pcs S/No's 06,07,08,09 + 1 control S/No 05.
               : TEST #7(i) EMS @ 5 Krad
               : 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

	5	6	7	8	9
1.1 [ V]	119.8	119.1	118.7	118.0	118.1
2.1 [mV]	2890.1	2492.9	2457.6	2502.2	2470.5
3.1 [nA]	0.9	3.4	0.9	0.9	1.0
4.1 [uA]	0	0	0	0	0
5.1 [Ohm]	0.147	0.139	0.139	0.137	0.137



SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
/N6796\_63664\_RAD\_TEST / 1.1 SMR 11/12/95

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=====
Results file   : RAD_TEST_63664_EMS_@_10_KRAD   from: 13.02.70 / 02:12:43
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : Date Code 9527A.
Order number  : RIR 63664
Vendor       : IR.
              : 4 pcs S/No's 06,07,08,09 + 1 control S/No 05.
              : TEST #7(ii) EMS @ 10 Krad
              : 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

	5	6	7	8	9
1.1 [ V]	119.9	118.5	118.5	118.0	118.0
2.1 [mV]	2889.8	2041.8	1995.3 F	2039.1	1985.4 F
3.1 [nA]	1.0	0.9	0.9	0.9	1.0
4.1 [uA]	0	0	0	0	0
5.1 [Ohm]	0.147	0.137	0.137	0.136	0.138

SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
/N6796\_63664\_RAD\_TEST / 1.1 SMR 11/12/95

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=====
Results file   : RAD_TEST_63664_EMS_@_15_KRAD   from: 13.02.70 / 02:43:02
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : Date Code 9527A.
Order number  : RIR 63664
Vendor        : IR.
               : 4 pcs S/No's 06,07,08,09 + 1 control S/No 05.
               : TEST #7(iii) EMS @ 15 Krad
               : 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

	5	6	7	8	9
1.1 [ V]	120.1	118.6	118.9	117.9	117.9
2.1 [mV]	2886.5	1601.6 F	1541.6 F	1594.2 F	1524.7 F
3.1 [nA]	1.0	1.0	0.9	1.0	1.0
4.1 [uA]	0	0	0	0	1
5.1 [Ohm]	0.149	0.136	0.137	0.137	0.137

SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
/N6796\_63664\_RAD\_TEST / 1.1 SMR 11/12/95

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=====
Results file   : RAD_TEST_EMS_@_20_KRAD   from: 13.02.70 / 03:14:01
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : Date Code 9527A.
Order number  : RIR 63664
Vendor       : IR.
              : 4 pcs S/No's 06,07,08,09 + 1 control S/No 05.
              : TEST #7(iv) EMS @ 20 Krad
              : 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

	5	6	7	8	9
1.1 [ V]	119.9	118.3	118.5	117.8	117.8
2.1 [mV]	2891.9	1181.7 F	1117.9 F	1166.8 F	1091.1 F
3.1 [nA]	0.9	1.0	0.9	1.0	1.0
4.1 [uA]	0	3	3	2	6
5.1 [Ohm]	0.147	0.133	0.133	0.132	0.134

SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
/N6796\_63664\_RAD\_TEST / 1.1 SMR 11/12/95

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=====
Results file   : RAD_TEST_63664_EMS_@_50_KRAD   from: 13.02.70 / 05:13:05
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : Date Code 9527A.
Order number  : RIR 63664.
Vendor       : IR.
              : 4 pcs S/No's 06,07,08,09 + 1 control S/No 05.
              : TEST #7(v) EMS @ 50 Krad
              : 2N6796 PO-PL-IG6-PL-0006 ISS 3 / 1.1 SMR 11/12/95.
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Test steps

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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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	5	6	7	8	9
1.1 [ V]	119.6	0.3 FI	0.4 FI	0.3 FI	0.2 FI
2.1 [mV]	2893.1	1.6 FI	2.8 FI	4.0 FI	3.4 FI
3.1 [nA]	0.9	1.0	0.9	0.9	0.9
4.1 [uA]	0	1065 FI	1064 FI	1064 FI	1065 FI
5.1 [Ohm]	0.147	0.130	0.130	0.129	0.130



SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
/N6796\_63664\_RAD\_TEST / 1.1 SMR 11/12/95

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=====
Results file   : RAD_TEST_63664_END_POINT_EMS   from: 13.02.70 / 06:42:56
Operator      : Steve Young.
Part number   : 2N6796.
Lot number    : Date Code 9527A.
Order number  : RIR 63664.
Vendor       : IR.
              : 4 pcs S/No's 06,07,08,09 + 1 control S/No 05.
              : TEST #8 END POINT EMS
              : 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

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	5	6	7	8	9
1.1 [ V]	119.1	0.2 FI	0.3 FI	0.3 FI	0.2 FI
2.1 [mV]	2910.4	0.3 FI	4.1 FI	4.8 FI	3.8 FI
3.1 [nA]	1.1	1.1	1.1	1.1	1.1
4.1 [uA]	0	1055 FI	1055 FI	1055 FI	1055 FI
5.1 [Ohm]	0.146	0.137	0.140	0.138	0.145

SZ-TESTSYSTEME Statistics 03 Vers. 2.15 for TA07F  
RAD\_TEST / 1.1 SMR 11/12/95

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=====
Results file   : RAD_TEST_63664_FINAL_EMS   from: 20.02.70 / 09:24:30
Operator      : S.M.RALPHS
Part number   : 2N6796
Lot number    : D/C 9527A
Order number  : RIR 63664
Vendor       : IR
              : QTY4+1 CONTROL S/NOS.006,007,008,009 CONTROL S/NO 005
              : TEST # 25 FINAL ELEC MEAS AT 168 HRS
              : 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

	5	6	7	8	9
1.1 [ V]	119.5	0.3 F	0.3 F	118.3	0.4 F
2.1 [mV]	2908.7	47.9 F	11.8 F	608.4 F	152.2 F
3.1 [nA]	0.6	0.6	0.6	0.7	0.6
4.1 [uA]	0	1113 F	1112 F	67	767 F
5.1 [Ohm]	0.143	0.142	0.140	0.149	0.146