



4/8/2009

RELIABILITY MONITOR REPORT  
FOR

**MFN 250V Bipolar CMOS DMOS**

**MAXIM Integrated Products**

120 San Gabriel Dr.  
Sunnyvale, CA 94086

This Report was prepared by  
Maxim Reliability Engineering

**Summary:**

The data in the tables that follow was generated as the result of an on-going Process Reliability Monitor. The specific products in this process monitor are:

MAX4800CCM	MAX4802CXZ+	MAX4990ETD+
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The calculated failure rate for devices using this process is:

**FAILURE RATE:**                      **MTTF (YRS): 3572**                      **FITS: 32.0**

The parameters used to calculate this failure rate are as follows:

**Cf: 60%**                      **Ea: 0.7**                      **Tu: 25 °C**

The reliability data follows and in this section is the detailed reliability data by stress. The reliability data section includes the latest data available. This report covers data between 7/1/2007 and 6/30/2008 .

**Process Information:**

Process Description:                      MFN 250V Bipolar CMOS DMOS

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0728	MAX4990ETD+	135C	192 HRS	48	0	NFVZBQ002CQ
HIGH TEMP OP LIFE	0728	MAX4990ETD+	135C	192 HRS	48	0	NFVZBQ002CQ
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	0611	MAX4800CCM	150C	1000 HRS	76	0	NEE0H5010A#
STORAGE LIFE	0728	MAX4802CXZ+	150C	1000 HRS	77	0	NEE1HA016Q1
STORAGE LIFE	0728	MAX4802CXZ+	150C	1000 HRS	77	0	NEE1HA016Q2
STORAGE LIFE	0728	MAX4802CXZ+	150C	1000 HRS	77	0	NEE1HA016Q3
<b>Total:</b>						<b>0</b>	

**TEMPERATURE CYCLE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	0611	MAX4800CCM	-65C TO 150C	500 CYS	76	0	NEE0H5010A#
TEMP CYCLE, 5' RAMP, 10' DWELL	0728	MAX4802CXZ+	-65C TO 150C	1000 CYS	77	0	NEE1HA016Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	0728	MAX4802CXZ+	-65C TO 150C	1000 CYS	77	0	NEE1HA016Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	0728	MAX4802CXZ+	-65C TO 150C	1000 CYS	77	0	NEE1HA016Q3
TEMP CYCLE, 5' RAMP, 10' DWELL	0751	MAX4990ETD+	-65C TO 150C	1000 CYS	500	0	NFVZBA008AA
TEMP CYCLE, 5' RAMP, 10' DWELL	0751	MAX4990ETD+	-65C TO 150C	1000 CYS	500	0	NFVZBA008AA

TEMP CYCLE, 5' RAMP, 0802 MAX4990ETD+ -65C TO 150C 1000 CYS 500 0 NFVZBA004DX  
10' DWELL

**Total: 0**

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**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	0611	MAX4800CCM	130C, 85% R.H.	100 HRS	10	0	NEE0H5010A#
						<b>Total:</b>	<b>0</b>

**FAILURE RATE: MTTF (YRS): 3572 FITS: 32.0**