



5/9/2009

RELIABILITY MONITOR REPORT  
FOR

**MFN Poly Emitter Complementary Bipolar**

**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:

806-0696-21+	MAX4167ESA+	MAX4312EEE+	MAX4394EUD+	MAX9144ESD+
MAX9931EUA	MAX9979KCT+			

The calculated failure rate for devices using this process is:

**FAILURE RATE:**                      **MTTF (YRS): 19115**                      **FITS: 6.0**

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 1/1/2008 and 12/31/2008.

**Process Information:**

Process Description:                      MFN Poly Emitter Complementary Bipolar

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0717	MAX9931EUA	135C	192 HRS	45	0	NFSYAQ001CQ
HIGH TEMP OP LIFE	0751	MAX9979KCT+W	135C	1000 HRS	45	0	NERWC4012AB
HIGH TEMP OP LIFE	0815	806-0696-21+	135C	1000 HRS	45	0	NFEZC4005BQ
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	0747	MAX4394EUD+	150C	1000 HRS	80	0	N8W0AA014K#
STORAGE LIFE	0752	MAX9144ESD+	150C	1000 HRS	80	0	N21ABA041J
STORAGE LIFE	0752	MAX4167ESA+	150C	1000 HRS	80	0	NB7ACA042P
STORAGE LIFE	0806	MAX4312EEE+	150C	1000 HRS	80	0	NWXADA009J#
<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	0747	MAX4394EUD+	-65C TO 150C	500 CYS	80	0	N8W0AAA014K#
TEMP CYCLE, 5' RAMP, 10' DWELL	0747	MAX4394EUD+	-65C TO 150C	1000 CYS	80	0	N8W0AA014K#
TEMP CYCLE, 5' RAMP, 10' DWELL	0752	MAX4167ESA+	-65C TO 150C	1000 CYS	80	0	NB7ACA042P
TEMP CYCLE, 5' RAMP, 10' DWELL	0806	MAX4312EEE+	-65C TO 150C	1000 CYS	80	0	NWXADA009J#
<b>Total:</b>						<b>0</b>	

**FAILURE RATE:**

**MTTF (YRS): 19115**

**FITS: 6.0**