

4/23/2015



RELIABILITY MONITOR REPORT  
FOR

**MFN SiGe HBT BiPolar (GST30)**

**MAXIM INTEGRATED**

160 RIO ROBLES  
SAN JOSE, CA 95134

This Report was prepared by  
**MAXIM INTEGRATED 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:

MAX109EHF+	MAX2750AUA	MAX2750AUA+	MAX2750EUA+
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The calculated failure rate for devices using this process is:

**FAILURE RATE: MTTF (YRS): 84633      QUANTITY: 534      FAILS: 0      FITS: 1.3**

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 4/1/2014 and 3/31/2015 .

**Process Information:**

Process Description:      MFN SiGe HBT BiPolar (GST30)

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1433	MAX2750EUA+	135°C	764 HRS	200	0	N7CBH3034CA
HIGH TEMP OP LIFE	1433	MAX2750EUA+	135°C	1000 HRS	200	0	N7CBH3034CA
HIGH TEMP OP LIFE	1444	MAX109EHF+	135°C	1000 HRS	44	0	NZT0EA004E
HIGH TEMP OP LIFE	1444	MAX109EHF+	135°C	464 HRS	45	0	NZT0EA004F
HIGH TEMP OP LIFE	1444	MAX109EHF+	135°C	524 HRS	45	0	NZT0EA004G
<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	1433	MAX2750AUA+	-65C TO +150C (Condition C)	200 CYS	100	0	N7CBH3034CA
TEMP CYCLE, 5' RAMP, 10' DWELL	1433	MAX2750AUA	-65C TO +150C (Condition C)	1000 CYS	100	0	N7CBH3034CA
<b>Total:</b>						<b>0</b>	

**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1433	MAX2750AUA+	130C, 85% R.H.	96 HRS	200	0	N7CBH3034CA
<b>Total:</b>						<b>0</b>	

**FAILURE RATE: MTTF (YRS): 84633      QUANTITY: 534      FAILS: 0      FITS: 1.3**