

4/23/2015



**RELIABILITY MONITOR REPORT
FOR**

MFN SiGe HBT 0.5 μ m CMOS (GST40)

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:

MAX3815CCM	MAX3815CCM+
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 13177 QUANTITY: 93 FAILS: 0 FITS: 8.7

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 0.5µm CMOS (GST40)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1432	MAX3815CCM	135°C	500 HRS	47	0	NXQ0AA250R1
HIGH TEMP OP LIFE	1432	MAX3815CCM+	135°C	1000 HRS	46	0	NXQ0AA250R1
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1432	MAX3815CCM+	-65C TO +150C (Condition C)	200 CYS	99	0	NXQ0AA250R1
TEMP CYCLE, 5' RAMP, 10' DWELL	1432	MAX3815CCM+	-65C TO +150C (Condition C)	1000 CYS	99	0	NXQ0AA250R1
Total:						0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1432	MAX3815CCM+	130C, 85% R.H.	96 HRS	46	0	NXQ0AA250R1
Total:						0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1432	MAX3815CCM+	130C, 85% R.H.	96 HRS	200	0	NXQ0AA250R1
Total:						0	

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