



7/19/2012

RELIABILITY MONITOR REPORT
FOR

MFN SiGe HBT 0.5 μ m CMOS (GST40)

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:

806-0637-20+	MAX2042ETP+	MAX2058ETL+	MAX2140ETH+
--------------	-------------	-------------	-------------

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 22210 QUANTITY: 255 FAILS: 0 FITS: 5.1

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 7/1/2011 and 6/30/2012 .

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	0906	MAX2042ETP+	135C	192 HRS	48	0	NHVWBQ002CQ
HIGH TEMP OP LIFE	1153	MAX2140ETH+	135C	524 HRS	79	0	NEZ0E2865E
HIGH TEMP OP LIFE	1153	MAX2140ETH+	135C	500 HRS	80	0	NEZ0E2864E
HIGH TEMP OP LIFE	1209	MAX2058ETL+	135C	500 HRS	48	0	NT40Z2220D
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1107	806-0637-20+	-65C TO 150C	1000 CYS	77	0	NM9753098A
Total:						0	

FAILURE RATE: MTTF (YRS): 22210 QUANTITY: 255 FAILS: 0 FITS: 5.1