

4/16/2014



**RELIABILITY MONITOR REPORT
FOR**

Epson MBiC3 SiGe HBT 0.35 μ m (MB3)

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:

MAX14966EWT	MAX2136AETJ/	MAX2553ETN/V	MAX2870ETJ+	MAX2880ETP+
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 24577 QUANTITY: 713 FAILS: 1 FITS: 4.6

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 4/1/2013 and 3/31/2014 .

Process Information:

Process Description: Epson MBiC3 SiGe HBT 0.35µm (MB3)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1309	MAX2136AETJ/V+	135°C	192 HRS	48	0	EAKK3Q001AQ
HIGH TEMP OP LIFE	1309	MAX2136AETJ/V+	135°C	192 HRS	32	0	EAKK3Q001BQ
HIGH TEMP OP LIFE	1314	MAX2553ETN/V+	135°C	192 HRS	79	0	EAKP0A016BA
HIGH TEMP OP LIFE	1314	MAX2553ETN/V+	135°C	500 HRS	79	0	EAKP0A016BA
HIGH TEMP OP LIFE	1319	MAX2553ETN/V+	135°C	192 HRS	78	0	EAKP0A008AA
HIGH TEMP OP LIFE	1319	MAX2553ETN/V+	135°C	500 HRS	77	0	EAKP0A008AA
HIGH TEMP OP LIFE	1333	MAX2870ETJ+	135°C	500 HRS	80	0	EANL3Q002C
HIGH TEMP OP LIFE	1333	MAX2870ETJ+	135°C	1028 HRS	80	0	EANL3Q002C
HIGH TEMP OP LIFE	1334	MAX14966EWT+T	135°C	192 HRS	80	0	EAMY5Q001AQ
HIGH TEMP OP LIFE	1346	MAX2880ETP+	135°C	240 HRS	80	1	EANF2Q001CQ
Total:						1	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1311	MAX2553ETN/V+	150°C	500 HRS	50	0	EAKP0A010AA
STORAGE LIFE	1314	MAX2553ETN/V+	150°C	500 HRS	50	0	EAKP0A016BA
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1311	MAX2553ETN/V+	-65C TO 150C	500 CYS	80	0	EAKP0A010AA
TEMP CYCLE, 5' RAMP, 10' DWELL	1314	MAX2553ETN/V+	-65C TO 150C	500 CYS	80	0	EAKP0A016BA
TEMP CYCLE, 5' RAMP, 10' DWELL	1319	MAX2553ETN/V+	-65C TO 150C	500 CYS	80	0	EAKP0A008AA

FAILURE RATE: **MTTF (YRS): 24577** **QUANTITY: 713** **Total:** **0**
FAILS: 1 **FITS: 4.6**