



7/19/2012

**RELIABILITY MONITOR REPORT
FOR**

MFN Standard Metal Gate CMOS (M6)

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:

MAX232MJE/88

The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 21800 QUANTITY: 135 FAILS: 0 FITS: 5.2

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 Standard Metal Gate CMOS (M6)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1142	MAX232MJE/883B	135C	1000 HRS	45	0	NPWBKD018Q3
HIGH TEMP OP LIFE	1143	MAX232MJE/883B	135C	500 HRS	45	0	NPWBKD018Q1
HIGH TEMP OP LIFE	1143	MAX232MJE/883B	135C	1000 HRS	45	0	NPWBKD018Q2
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1143	MAX232MJE/883B	150C	1000 HRS	77	0	NPWBKD018Q1
STORAGE LIFE	1143	MAX232MJE/883B	150C	1000 HRS	77	0	NPWBKD018Q2
STORAGE LIFE	1143	MAX232MJE/883B	150C	1000 HRS	77	0	NPWBKD018Q3
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1143	MAX232MJE/883B	-65C TO 150C	1000 CYS	77	0	NPWBKD018Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1143	MAX232MJE/883B	-65C TO 150C	1000 CYS	77	0	NPWBKD018Q2
TEMP CYCLE, 5' RAMP, 10' DWELL	1143	MAX232MJE/883B	-65C TO 150C	1000 CYS	77	0	NPWBKD018Q3
Total:						0	

FAILURE RATE: MTTF (YRS): 21800 QUANTITY: 135 FAILS: 0 FITS: 5.2