



4/8/2009

**RELIABILITY MONITOR REPORT  
FOR**

**MFN 1.2 $\mu$ m High Voltage BiCMOS**

**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:

806-0634+22	806-0634-22+	806-0682-23+	806-068302-	806-0683-20
806-0683-23+				

The calculated failure rate for devices using this process is:

**FAILURE RATE:**                      **MTTF (YRS): 62010**                      **FITS: 1.8**

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 7/1/2007 and 6/30/2008 .

**Process Information:**

Process Description:                      MFN 1.2µm High Voltage BiCMOS

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	0706	806-0634-22+	135C	1000 HRS	44	0	NFI0C3083B
HIGH TEMP OP LIFE	0706	806-0634-22+	135C	1000 HRS	45	0	NFI0C3083D
HIGH TEMP OP LIFE	0732	806-068302-	135C	500 HRS	77	0	NZ1AD4017Q
HIGH TEMP OP LIFE	0732	806-068302-	135C	500 HRS	77	0	NZ1AD4017Q
HIGH TEMP OP LIFE	0732	806-0683-20	135C	1000 HRS	77	0	NZ1AD4017Q
HIGH TEMP OP LIFE	0732	806-0683-20	135C	1000 HRS	77	0	NZ1AD4017Q
<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	0706	806-0634-22+	-65C TO 150C	1000 CYS	77	0	NFI0C3083B
TEMP CYCLE, 5' RAMP, 10' DWELL	0706	806-0634-22+	-65C TO 150C	1000 CYS	76	0	NFI0C3083C
TEMP CYCLE, 5' RAMP, 10' DWELL	0706	806-0634+22	-65C TO 150C	1000 CYS	77	0	NFI0C03083D
TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0683-23+	-65C TO 150C	1000 CYS	77	0	NZ1AD4017QA
TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0683-23+	-65C TO 150C	1000 CYS	77	0	NZ1AD4017QA
TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0683-23+	-65C TO 150C	1000 CYS	77	0	NZ1AD4017QB
TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0682-23+	-65C TO 150C	500 CYS	77	0	NZ1AD4017QB
TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0683-23+	-65C TO 150C	1000 CYS	77	0	NZ1AD4017QB
TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0682-23+	-65C TO 150C	500 CYS	77	0	NZ1AD4017QB

TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0683-23+	-65C TO 150C	1000	CYS	77	0	NZ1AD4017QC
TEMP CYCLE, 5' RAMP, 10' DWELL	0732	806-0683-23+	-65C TO 150C	1000	CYS	77	0	NZ1AD4017QC
<b>Total:</b>							<b>0</b>	

**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.	
MOISTURE SOAK	0706	806-0634-22+	85 C/85% R.H.	500	HRS	45	0	NF10C3083C
<b>Total:</b>							<b>0</b>	

**FAILURE RATE:**                      **MTTF (YRS): 62010**                      **FITS: 1.8**