

6/25/2020



**RELIABILITY MONITOR REPORT  
FOR**

**MFN S12**

**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:

MAX1873SEEE+	MAX5170BEEE+	MAX6126AASA	MAX6126AASA	MAX6126BASA2
MAX6226ALA25	MAX9022AUA+	MAX9050AEUK		

The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 33788    QUANTITY: 239    FAILS: 0    FITS: 3.4**

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 1/1/2020 and 3/31/2020 .

**Process Information:**

Process Description:            MFN S12

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1804	MAX9050AEUK+T	125°C	192 HRS	80	0	N3HBCA046AA
HIGH TEMP OP LIFE	1839	MAX6226ALA25+	125°C	1000 HRS	80	0	NAI1BA263KC
HIGH TEMP OP LIFE	1910	MAX5170BEEE+	125°C	1000 HRS	79	0	NAEZ1A136JA
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1804	MAX9050AEUK+T	150°C	1000 HRS	80	0	N3HBCA046AA
STORAGE LIFE	1910	MAX5170BEEE+	150°C	500 HRS	80	0	NAEZ1A136JA
STORAGE LIFE	1921	MAX9022AUA+	150°C	1000 HRS	80	0	N1QABA045AA
STORAGE LIFE	1948	MAX1873SEEE+	150°C	1000 HRS	80	0	N2W1DA277AX
<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	1832	MAX5170BEEE+	-65C TO +150C (Condition C)	1000 CYS	79	0	NAEZ13131GX
TEMP CYCLE, 5' RAMP, 10' DWELL	1910	MAX5170BEEE+	-65C TO +150C (Condition C)	1000 CYS	80	0	NAEZ1A136JA
TEMP CYCLE, 5' RAMP, 10' DWELL	1921	MAX9022AUA+	-65C TO +150C (Condition C)	1000 CYS	80	0	N1QABA045AA

TEMP CYCLE, 5' RAMP, 1948 10' DWELL	MAX1873SEEE+	-65C TO +150C (Condition C)	1000 CYS	80	0	N2W1DA277AX
<b>Total:</b>					<b>0</b>	

**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1804	MAX9050AEUK+T	130C, 85% R.H.	96 HRS	80	0	N3HBCA046AA
BIASED MOISTURE	1910	MAX5170BEEE+	130C, 85% R.H.	96 HRS	79	0	NAEZ1A136JA
<b>Total:</b>						<b>0</b>	

**UNBIASED MOISTURE RESISTANCE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
MOISTURE SOAK	1804	MAX9050AEUK+T	130C, 85% R.H.	96 HRS	80	0	N3HBCA046AA
MOISTURE SOAK	1948	MAX1873SEEE+	130C, 85% R.H.	96 HRS	77	0	N2W1DA277AX
<b>Total:</b>						<b>0</b>	

**FAILURE RATE:      MTF (YRS): 33788      QUANTITY: 239      FAILS: 0      FITS: 3.4**