

**8/1/2019**



**RELIABILITY MONITOR REPORT  
FOR**

**MFN SG5**

**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:

MAX222CWN+	MAX232ACWE+
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The calculated failure rate for devices using this process is:

**FAILURE RATE:    MTTF (YRS): 31005    QUANTITY: 160    FAILS: 0    FITS: 3.7**

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 4/1/2019 and 8/1/2019 .

**Process Information:**

Process Description:            MFN SG5

**OPERATING LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1808	MAX222CWN+	125°C	1000 HRS	80	0	NQS4AA608A
HIGH TEMP OP LIFE	1907	MAX222CWN+	125°C	1000 HRS	80	0	NQS4AA2A6AX
<b>Total:</b>						<b>0</b>	

**STORAGE LIFE**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1822	MAX232ACWE+	150°C	1000 HRS	80	0	NQS0A3984D
STORAGE LIFE	1907	MAX222CWN+	150°C	1000 HRS	80	0	NQS4AA2A6AX
<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	1822	MAX232ACWE+	-65C TO +150C (Condition C)	1000 CYS	80	0	NQS0A3984D
TEMP CYCLE, 5' RAMP, 10' DWELL	1907	MAX222CWN+	-65C TO +150C (Condition C)	1000 CYS	80	0	NQS4AA2A6AX
<b>Total:</b>						<b>0</b>	

**TEMPERATURE HUMIDITY BIAS**

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
BIASED MOISTURE	1822	MAX232ACWE+	130C, 85% R.H.	96 HRS	80	0	NQS0A3984D
MOISTURE SOAK	1907	MAX222CWN+	130C, 85% R.H.	96 HRS	80	0	NQS4AA2A6AX
<b>Total:</b>						<b>0</b>	

**FAILURE RATE:**    **MTTF (YRS): 31005**    **QUANTITY: 160**    **FAILS: 0**    **FITS: 3.7**