



7/19/2012

**RELIABILITY MONITOR REPORT  
FOR**

**MFN SiGe HBT BiPolar (GST30)**

**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:

|             |            |             |
|-------------|------------|-------------|
| MAX2750AUA+ | MAX3801UGG | MAX3802UTK+ |
|-------------|------------|-------------|

The calculated failure rate for devices using this process is:

**FAILURE RATE: MTTF (YRS): 15766 QUANTITY: 160 FAILS: 0 FITS: 7.2**

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 SiGe HBT BiPolar (GST30)

**OPERATING LIFE**

| DESCRIPTION       | DATE CODE | TEST VEHICLE | CONDITION | READPOINT | QUANTITY | FAILS    | LOT NO.    |
|-------------------|-----------|--------------|-----------|-----------|----------|----------|------------|
| HIGH TEMP OP LIFE | 1209      | MAX3801UGG   | 135C      | 500 HRS   | 80       | 0        | N250A3338A |
| HIGH TEMP OP LIFE | 1209      | MAX3802UTK+  | 135C      | 517 HRS   | 80       | 0        | N9R1BA067E |
| <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 | 1112      | MAX2750AUA+  | -65C TO 150C | 1000 CYS  | 75       | 0        | N7CBHA016CA |
| <b>Total:</b>                  |           |              |              |           |          | <b>0</b> |             |

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