



## Highly Accelerated Temperature and Humidity Stress Test

JESD22-A118  
96 Hours (UHASt) Unbiased  
Temp = 130°C, RH = 85% Vapor Pressure = 17.7 psia

The Unbiased HAST is performed for the purpose of evaluating the reliability of non-hermetic packaged solid-state devices in humid environments. It is a highly accelerated test that employs temperature and humidity under noncondensing conditions to accelerate the penetration of moisture through the external protective material (encapsulant or seal) or along the interface between the external protective material and the metallic conductors that pass through it. Bias is not applied in this test to ensure the failure mechanisms potentially overshadowed by bias can be uncovered (e.g., galvanic corrosion). This test is used to identify failure mechanisms internal to the package and is destructive.

### Test Results

Part Type	Description	Sample Size	Date	Results
MT3-0113LCQG	MMIC T3 Mixer RF 1.5 - 13	24	May 2018	Pass
MM1-1140H	MMIC Mixer RF 11 - 40 GHz +15	5	May 2018	Pass
M1-0420LA	Mixer RF 4-20 GHz +7 dBm A pkg	3	May 2018	Pass
M1-0420HA	Mixer RF 4-20 GHz +16 dBm A pkg	3	May 2018	Pass
T3-08LCQG	T3 MIXER RF 10-8000 MHz +15 dB	24	Mar 2017	Pass
ADM-0126-5928SM	MMIC Amplifier	20	Aug 2016	Pass

By similarity any product using the same assembly techniques and materials can use these results for qualification.

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