



HAST Summary

Cage Code	SIZE	Version			
OUC32	A	#	Description	Date	Approved
Document No.		1.2	Add to Docuware	09/14/22	JCG
051-06893		1.1	Added more part numbers	09/14/22	MZ
Test Summary		1.0	Changed format and to Docuware versioning	12/24/19	MG

1. Purpose and Scope

The Highly Accelerated Temperature and Humidity Stress Test is performed for the purpose of evaluating the reliability of non-hermetic solid-state devices in humid environments. It employs severe conditions of temperature, humidity and bias which 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 which pass through it. The stress usually activates the same failure mechanisms as the "85/85" Steady-State Humidity Life Test.

2. Reference

JESD22-A110

HIGHLY ACCELERATED TEMPERATURE AND HUMIDITY STRESS TEST (HAST)

3. Test Results

Part Type	Description	Test Condition	Sample Size	Date	Results
BAL-0003SMG	Broadband Balun 500 kHz - 3 GH	105°C, 85%RH for 352Hrs. RF 15.5dB	3	3/25/20	Pass
PD-0040	Resistive Power Divider. DC to 40GHz	105°C, 85%RH for 352Hrs. RF 18dB	3	11/1/19	Pass
PD-0030	Resistive Power Divider. DC to 30GHz	105°C, 85%RH for 352Hrs. RF 18dB	2	11/1/19	Pass
EVAL-MM1-2567L	MMIC Mixer RF	105°C, 85%RH for 352Hrs. RF 28dB	5	7/30/19	Pass
MT3-0113QCQG-2	MMIC Triple Balanced Mixer	105°C, 85%RH for 352Hrs. RF 28dB	2	7/8/19	Pass
MT3-0113SCQG-2	MMIC Triple Balanced Mixer	105°C, 85%RH for 352Hrs. RF 28dB	2	7/8/19	Pass
PD-0R510	Power divider, 0.5 to 10 GHz	105°C, 85%RH for 352Hrs. RF 20dB	3	5/3/19	Pass
EVAL-MM1-1850H	MMIC Mixer RF 18 - 50 GHz	105°C, 85%RH for 352Hrs. RF 20dB	5	5/13/19	Pass
EVAL-MEQ3-14A	MMIC Equalizer 14 GHz 3dB	105°C, 85%RH for 352Hrs. 14mA	4	3/22/19	Pass
EVAL-MEQ6-14A	MMIC Equalizer 14 GHz 6dB	105°C, 85%RH for 352Hrs. 14mA	4	3/22/19	Pass
EVAL-MEQ10-14A	MMIC Equalizer 14 GHz 10dB	105°C, 85%RH for 352Hrs. 14mA	4	3/22/19	Pass
EVAL-MEQ12-7A	MMIC Equalizer 7 GHz 12.5dB	105°C, 85%RH for 352Hrs. 14mA	4	3/22/19	Pass
EVAL-MEQ3-20A	MMIC Equalizer 20 GHz 3dB	105°C, 85%RH for 352Hrs. 14mA	3	3/22/19	Pass
EVAL-MEQ5-20A	MMIC Equalizer 20 GHz 5dB	105°C, 85%RH for 352Hrs. 14mA	3	3/22/19	Pass