



[www.markimicrowave.com](http://www.markimicrowave.com)

## Accelerated Moisture Resistance (Autoclave)

Cage Code	SIZE	Version			
0UC32	A	#	Description	Date	Approved
Document No.		1.1	Add to Docuware	09/14/22	JCG
<b>051-07134</b>		1.0	Changed format and to Docuware versioning	12/24/19	MG
Test Summary					

### 1. Purpose and Scope

The purpose of the "Unbiased Autoclave Test" is performed to evaluate the moisture resistance integrity of non-hermetic packaged solid-state devices using moisture condensing or moisture saturated steam environments. It is a highly accelerated test that employs conditions of pressure, humidity and temperature under condensing conditions to accelerate moisture penetration through the external protective material (encapsulant or seal) or along the interface between the external protective material and the metallic conductors passing through it. This test is used to identify failure mechanisms internal to the package and is destructive.

### 2. Reference

JESD22-A102                      Accelerated Moisture Resistance (Autoclave)

### 3. Test Results

Part Type	Description	Test Condition	Sample Size	Date	Results
AMM-6702SM	MMIC Broadband LO Buffer AMP	96Hrs in 121°C and 100%RH	5	8/6/19	Pass
MM1-1850HSM-2	MMIC Mixer RF 18 – 50GHz	96Hrs in 121°C and 100%RH	3	5/31/19	Pass
BT-0014SMG-2	SM Bias Tee 14GHz	96Hrs in 121°C and 100%RH	21	4/5/19	Pass
T3-20LS	T3 Mixer RF 10MHz – 20GHz	96Hrs in 121°C and 100%RH	1	4/5/19	Pass
MT3-0113LCQG-2	MMIC T3 Mixer RF 1.5GHz – 13GHz	96Hrs in 121°C and 100%RH	24	May 2018	Pass
MM1-1140HS	MMIC Mixer RF 11 – 40GHz	96Hrs in 121°C and 100%RH	5	May 2018	Pass
M1-0420LP	Mixer RF – 20GHz	96Hrs in 121°C and 100%RH	3	May 2018	Pass
M1-0420MP	Mixer RF 4 – 20GHz	96Hrs in 121°C and 100%RH	3	May 2018	Pass
T3-08LCQG	T3 Mixer RF 10MHz – 8GHz	96Hrs in 121°C and 100%RH	24	Mar 2017	Pass
ADM-0126-5928SM	MMIC Amplifier	96Hrs in 121°C and 100%RH	40	Aug 2016	Pass