

ROHID Anti-whisker formation of leadfree plating

1. The Applicable Product

BD25GA3WEFJ-E2

2. Evaluation Package

No	Item	Information	
1	Subject	LSI product of Leadfree plating	
2	Type of Terminal Plating	Sn	
3	Plating Grain Size	2μm to 10μm	
4	Bath type	Alkyl sulfonic acid, Electro plating	
5	Matt or Bright	Matt	
6	Under Plating	None	
7	Type of Frame	Cu Alloy frame	

3. Compliance standerds

Tin Whisker Acceptance Test Requirements (NEMI Tin Whisker Users Group, July 28, 2004)

4. Test Flow

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Ī	No	Test Flow	Test Condition				
Ī	1	Preparation	MP. condition				
Ī	2	Pre Inspection	SEMx250, Top/Side/Forming Section				
Ī	3	Preconditioning-1	Storage at ambient temp. for 4 weeks				
	4	Preconditioning-2	215°C Reflow, 255°C Reflow				
		Applying Stress	1. 30°C, 70% RH, 4,000hr				
	5		2. 60°C, 87% RH, 4,000hr				
	5		355/+85°C, 2,000cyc				
			4. 30°C, 70%, Bias, 4,000hr				
Ī	6	Screening Inspection	x 50, Top/Side/Forming Section				
	7	Detailed Inspection	SEMx250, Top/Side/Forming Section				
L	•	Botanoa moposton	SEMIXESS, ISPASIASM SIMILING SESSION				

5. Test Result

Criteria: Not allow, the whisker is larger than 40µm between lead to lead.

No	Preconditioning-1	Preconditioning-2	Stress Condition	Result:Pn/n
INO				(pcs)
1	Storage at ambient	None	30°C, 70% RH 4,000hr	0/96
2		None	60°C, 87% RH 4,000hr	0/96
3		215°C Reflow Simulation	30°C, 70% RH 4,000hr	0/96
4		213 C Reliow Simulation	60°C, 87% RH 4,000hr	0/96
5	temprature.	255°C Reflow Simulation	30°C, 70% RH 4,000hr	0/96
6	4 weeks	200 C Reliow Simulation	60°C, 87% RH 4,000hr	0/96
7		215°C Reflow Simulation	–55/+85°C 2,000cyc	0/96
8		255°C Reflow Simulation	–55/+85°C 2,000cyc	0/96
9		215°C Reflow Assembly	30°C, 70%, Bias 4,000hr	0/96

Therefore, wisker is no problem.

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