

# Whisker assessment of external plating

#### 1. Product

SiC discrete products with leadfree external plating

#### 2. Method

#### (1) Test condition and criteria

Whisker length after test must be within the criteria below.

Stress Type		Preconditioning Treatment	Duration	Criteria
Temperature Cycling	-55 +0/-10 °C 85 +10/-0 °C		1500cyc	Whisker length <45um
Temperature / Humidity Storage	30 ±2°C 60 ±3% RH	Depends on components	4000hr	Whisker length <40um
High Temperature Humidity Storage	55 ±3°C 85 ±3% RH		4000hr	Whisker length <40um

#### (2) Sample size

18 pcs total (6 pcs per test) for each package type.

### 3. Whisker Test result

Declara	Lead Frame material	Lead finish		sample	failure(s)
Package		Method	Composition	size n (pcs)	pn (pcs)
TO-263AB (LPTL)	Cu	electroplating	Sn-2Cu	6	0
TO-220AB			Sn	6	0
TO-220AC				6	0
TO-220FM				6	0
TO-247				6	0
TO-247N				6	0
TO-3PFM				6	0
TO-252M				6	0
TO-268-2L				6	0

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