



PLCC44

RoHS Compliance Document

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PLCC44

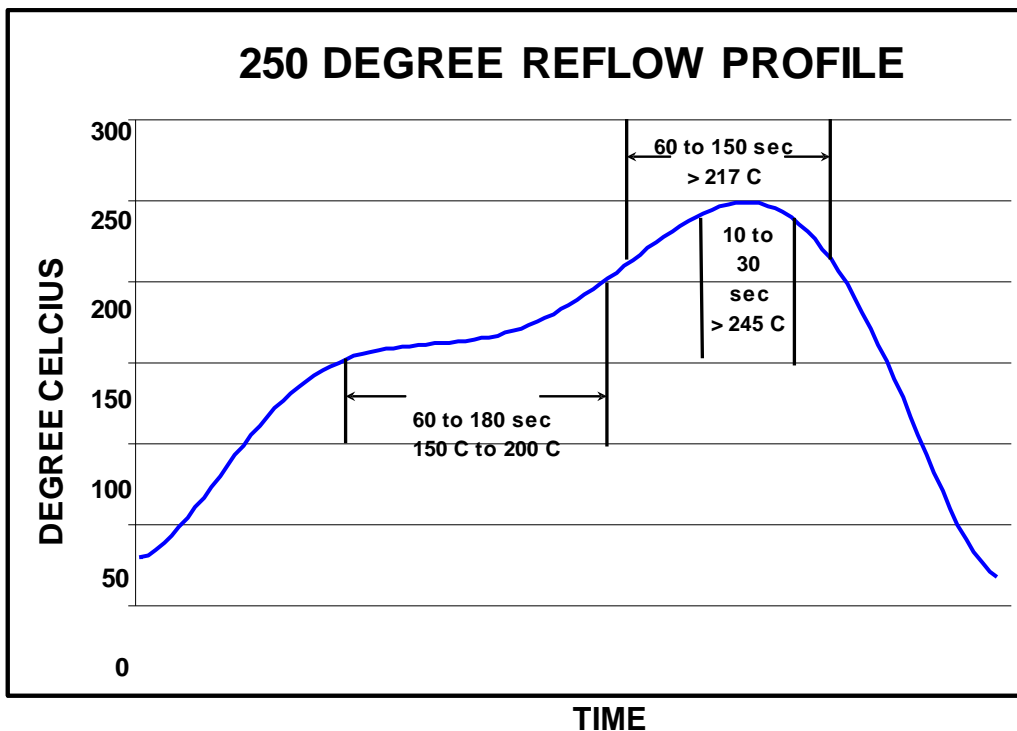
Component	Material Name	Material Mass (g)	Element Name Composition	CAS #	Substance Mass (g)	Material Analysis Weight (%)	% of Total Weight
Chip	Silicon	0.00030	Si	7440-21-3	0.00030	100%	0.0%
Encapsulant	Epoxy Resin	1.72777	SiO ₂	7631-86-9	1.47597	85%	62.9%
			Epoxy	90598-46-2	0.22054	13%	9.4%
			Other	-	0.03126	2%	1.3%
Lead Frame	Copper	0.48403	Cu	7440-50-8	0.48252	100%	20.6%
			Fe	7439-89-6	0.00151	0%	0.1%
Die Attach	Soft Solder	0.11312	Ag	7440-22-4	0.08946	79%	3.8%
			Epoxy	90598-46-2	0.01731	15%	0.7%
			Other	-	0.00635	6%	0.3%
Wire Bond	Copper	0.00125	Cu	7440-50-8	0.00125	100%	0.1%
Lead Finish	Matte Tin*	0.02000	Sn	7440-31-5	0.02000	100%	0.9%

Total Weight

(g)

2.34647

*Tin whisker mitigation strategy is 150 °C, 1 hour anneal within 24 hours of tin plating.



This part is compliant with EU Directive 2011/65/EU (RoHS Directive) and does not contain lead, mercury, cadmium (0.01%), hexavalent chromium, PBB or PBDE in concentrations greater than 0.1%, except as permitted by Annex (7).



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Test Definition	Test Conditions	Inspection Interval Class 1 and 2 Products	Total Duration Class 1 and 2 Products	Maximum Whisker Length (µm)
Room Temperature Humidity	30± 2°C/60± 3% RH	1000 hours	4000 hours	20
Temperature Humidity Unbiased	55± 3°C/85± 3% RH	1000 hours	4000 hours	20
Temperature Cycling	-40 to 55°C to 80 to 95°C, air to air, 10 min soak, approx 3	500 cycles	1500 cycles	45

Tin Whisker testing per JESD201, Environmental Acceptance Requirements for Tin Whisker Susceptibility of Tin and Tin Alloy Surface Finish

Tin Whisker Results (number of failing whiskers)

Test	1000 Hours	2000 Hours	3000 Hours	4000 Hours
Room Temperature Humidity Storage	0/24	0/24	0/24	0/24
Temperature Humidity	0/24	0/24	0/24	0/24
Test	500 Cycles	1000 Cycles	1500 Cycles	
Temperature Cycling	0/24	0/24	0/24	