



Micro3 RoHS Compliance Document

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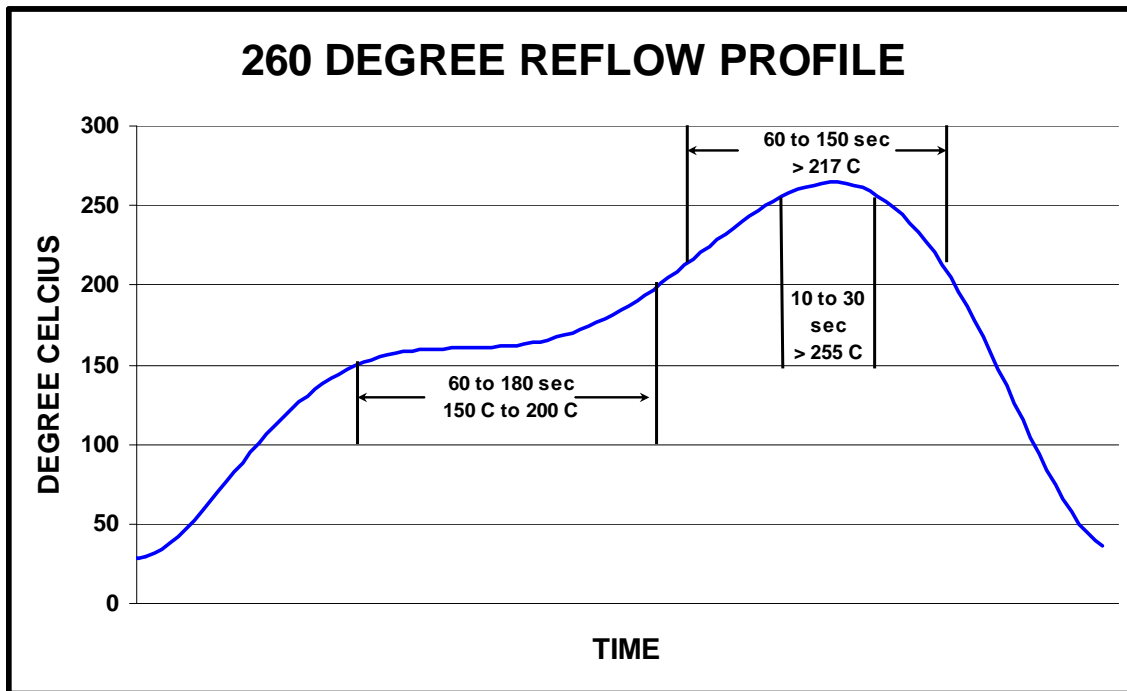
1. Composition
2. Solder Reflow
3. Tin Whisker Report



MICRO-3

Component	Material Name	Material Mass (g)	Element Name Composition	CAS #	Substance Mass (g)	Material Analysis Weight (%)	% of Total Weight
Chip	Silicon	0.00050	Si	7440-21-3	0.00050	100%	5.6%
Encapsulant	Epoxy Resin	0.00548	SiO2	7631-86-9	0.00386	70%	42.9%
			Epoxy	90598-46-2	0.00137	25%	15.2%
			Other	-	0.00025	5%	2.8%
Lead Frame	Copper	0.00241	Cu	7440-50-8	0.00229	95%	25.5%
			Fe	7439-89-6	0.00012	5%	1.3%
Die Attach	Silver Epoxy	0.00007	Ag	7440-22-4	0.00005	71%	0.6%
			Epoxy	90598-46-2	0.00002	29%	0.2%
Wire bond	Copper	0.00010	Cu	7440-50-8	0.00010	100%	1.1%
Lead Finish	Matte Tin	0.00043	Sn	7440-31-5	0.00043	100%	4.8%
MSL1 at 260 C		Total Weight (g)		0.00899			

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



This part is compliant with EU Directive 2002/95/EC (RoHS) 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 (um)
Room Temperature Humidity Storage	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 cycles /hours	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 Unbiased	0/24	0/24	0/24	0/24
Test	500 Cycles	1000 Cycles	1500 Cycles	
Temperature Cycling	0/24	0/24	0/24	