



SOIC-16

RoHS Compliance Document

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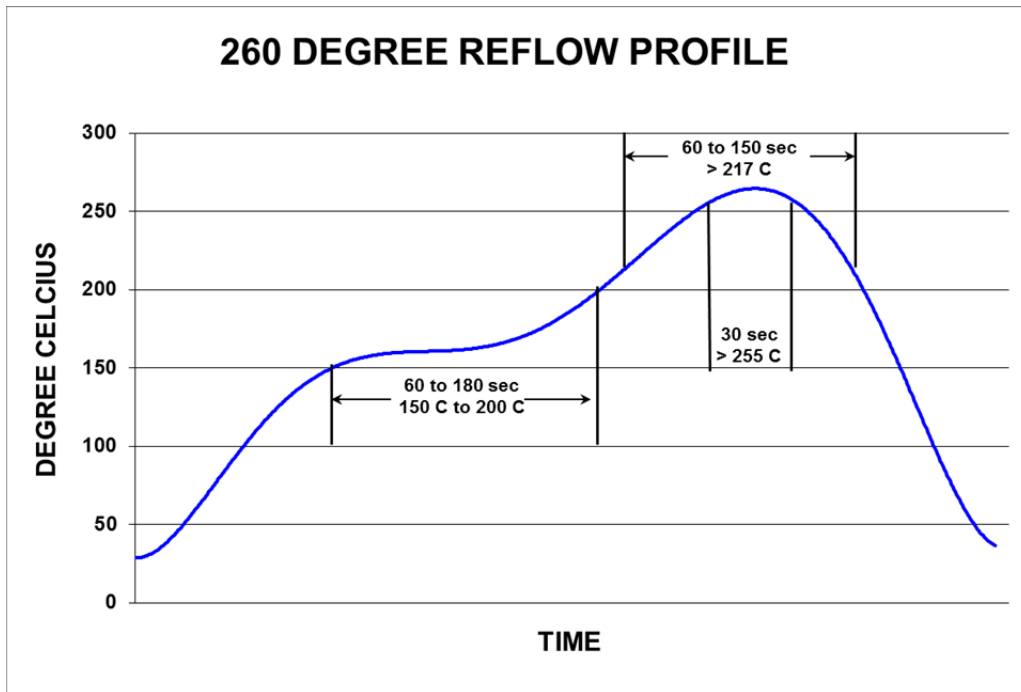
SOIC-16 BOM 1

Component	Material Name	Material Mass (g)	Element Name Composition	CAS #	Substance Mass (g)	Material Analysis Weight (%)	% of Total Weight
Chip	Silicon	0.00355	Si	7440-21-3	0.00355	100%	2.3%
Encapsulant	Epoxy Resin	0.09429	SiO ₂	7631-86-9	0.08100	86%	52.3%
			Epoxy	90598-46-2	0.01157	12%	7.5%
			Other	-	0.00172	2%	1.1%
Lead Frame	Copper	0.05238	Cu	7440-50-8	0.05102	97%	33.0%
			Fe	7439-89-6	0.00136	3%	0.9%
Die Attach	Silver Epoxy	0.00111	Ag	7440-22-4	0.00087	79%	0.6%
			Epoxy	90598-46-2	0.00017	15%	0.1%
			Other	-	0.00007	6%	0.0%
Wire Bond	Gold	0.00051	Au	7440-57-5	0.00051	100%	0.3%
Lead Finish	Tin*	0.00292	Sn	7440-31-5	0.00292	100%	1.9%

Total Weight
(g)

0.15476

*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 III. Further part complies with 3 reflow cycles per JEDEC J-STD-020



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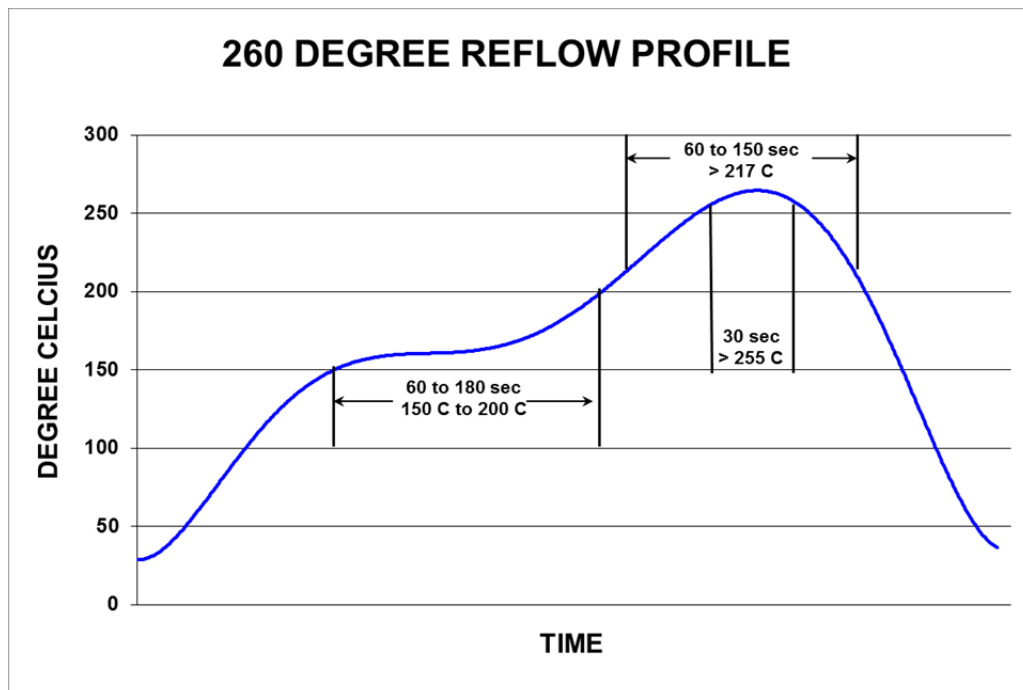
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Test Definition	Test Conditions	Inspection Interval Class 1 and 2 Products	Total Duration Class 1 and 2 Product	Maximum Whisker Length (µm)
Room Temperature Humidity	30± 2°C/60± 3% RH	1000 hours	4000 hours	20
Temperature Humidity Unbiase	55± 3°C/85± 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	