



SOIC-14

RoHS Compliance Document

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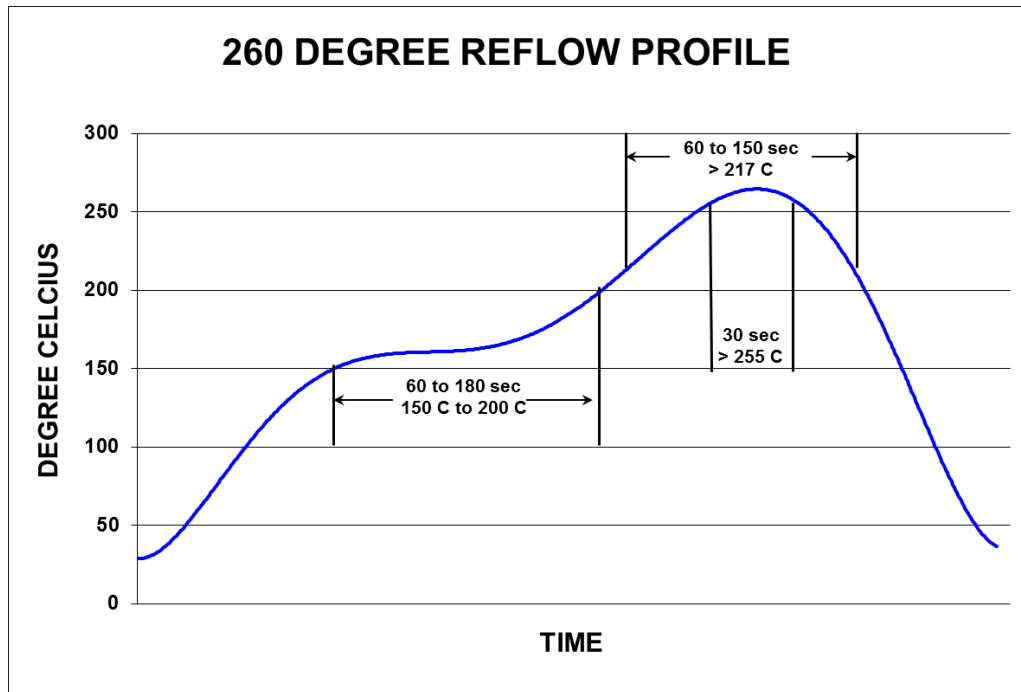


SOIC-14 BOM 1

| Component | Material Name | Material Mass (g) | Element Name Composition | CAS # | Substance Mass (g) | Material Analysis Weight (%) | % of Total Weight |
|-------------|---------------|-------------------|--------------------------|------------|--------------------|------------------------------|-------------------|
| Chip | Silicon | 0.00362 | Si | 7440-21-3 | 0.00362 | 100% | 2.6% |
| Encapsulant | Epoxy Resin | 0.08080 | SiO ₂ | 7631-86-9 | 0.06946 | 86% | 50.5% |
| | | | Epoxy | 90598-46-2 | 0.00992 | 12% | 7.2% |
| | | | Other | - | 0.00142 | 2% | 1.0% |
| Lead Frame | Copper | 0.04913 | Cu | 7440-50-8 | 0.04787 | 97% | 34.8% |
| | | | Fe | 7439-89-6 | 0.00126 | 3% | 0.9% |
| Die Attach | Silver Epoxy | 0.00108 | Ag | 7440-22-4 | 0.00085 | 79% | 0.6% |
| | | | Epoxy | 90598-46-2 | 0.00017 | 16% | 0.1% |
| | | | Other | - | 0.00006 | 6% | 0.0% |
| Wire Bond | Gold | 0.00049 | Au | 7440-57-5 | 0.00049 | 100% | 0.4% |
| Lead Finish | Tin* | 0.00256 | Sn | 7440-31-5 | 0.00256 | 100% | 1.9% |

Total Weight
(g) **0.13768**

*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). Further part complies with 3 reflow cycles per JEDEC J-STD-020 (current rev).



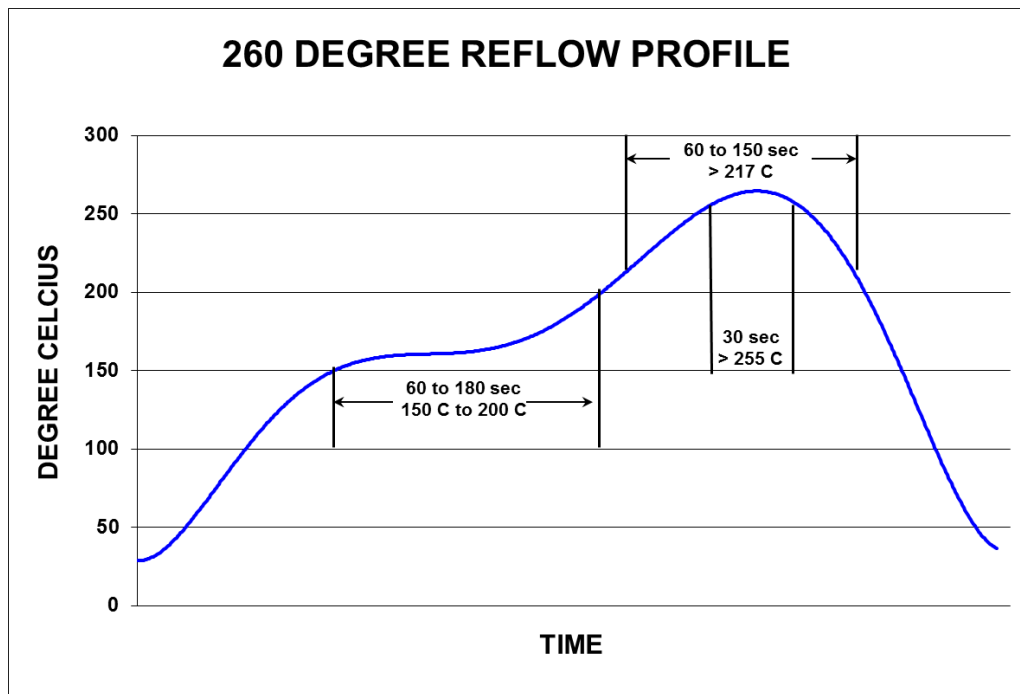
SOIC-14 BOM 2

| Component | Material Name | Material Mass (g) | Element Name Composition | CAS # | Substance Mass (g) | Material Analysis Weight (%) | % of Total Weight |
|-------------|---------------|-------------------|--------------------------|------------|--------------------|------------------------------|-------------------|
| Chip | Silicon | 0.00362 | Si | 7440-21-3 | 0.00362 | 100% | 2.6% |
| Encapsulant | Epoxy Resin | 0.08080 | SiO ₂ | 7631-86-9 | 0.06946 | 86% | 50.5% |
| | | | Epoxy | 90598-46-2 | 0.00992 | 12% | 7.2% |
| | | | Other | - | 0.00142 | 2% | 1.0% |
| Lead Frame | Copper | 0.04913 | Cu | 7440-50-8 | 0.04787 | 97% | 34.8% |
| | | | Fe | 7439-89-6 | 0.00126 | 3% | 0.9% |
| Die Attach | Silver Epoxy | 0.00108 | Ag | 7440-22-4 | 0.00085 | 79% | 0.6% |
| | | | Epoxy | 90598-46-2 | 0.00017 | 16% | 0.1% |
| | | | Other | - | 0.00006 | 6% | 0.0% |
| Wire Bond | Copper | 0.00049 | Cu | 7440-50-8 | 0.00049 | 100% | 0.4% |
| Lead Finish | Tin* | 0.00256 | Sn | 7440-31-5 | 0.00256 | 100% | 1.9% |

Total Weight
(g)

0.13768

*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). Further part complies with 3 reflow cycles per JEDEC J-STD-020 (current rev).



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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 Unbias | 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 | |