



Apex Microtechnology Materials Substance Report

Model: PA94

Print Time: 9/19/2013 9:31:08 AM

RoHS Compliant: Yes

Lead Free: No

| Bonding Island Substances | Total Weight (g) |
|----------------------------------|-------------------------|
| NONE | N/A |
| Capacitor Substances | Total Weight (g) |
| Barium Titanate | 8.09E-2 |
| Bismuth Titanate | 4.76E-3 |
| Calcium Zirconate | 4.76E-3 |
| Manganese Oxide | 4.76E-3 |
| Nickel | 9.52E-4 |
| Palladium | 8.93E-4 |
| Silica | 4.76E-3 |
| Silver | 1.70E-2 |
| Tin | 2.38E-4 |
| Die Substances | Total Weight (g) |
| Aluminum | 4.49E-5 |
| Epoxy | 9.71E-5 |
| Gold | 6.58E-5 |
| Nickel | 2.61E-5 |
| Silicon | 1.05E-2 |
| Silver | 1.64E-3 |
| Tin | 5.06E-3 |
| Titanium | 3.80E-6 |
| Encapsulant Substances | Total Weight (g) |
| NONE | N/A |
| Frame Substances | Total Weight (g) |
| Epoxy | 3.20E-2 |
| Glass | 9.20E-2 |
| Polymeric Resin | 2.16E-1 |



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Header Substances

| | Total Weight (g) |
|-------------|-------------------------|
| Carbon | 6.62E-3 |
| Iron | 6.58E+0 |
| Manganese | 2.72E-2 |
| Nickel | 5.78E-2 |
| Phosphorous | 2.65E-3 |
| Sulfur | 3.31E-3 |

Lead Frame Substances

| | Total Weight (g) |
|------|-------------------------|
| NONE | N/A |

Lid Substances

| | Total Weight (g) |
|-----------------|-------------------------|
| Glass | 1.54E-1 |
| Polymeric Resin | 3.60E-1 |

Pin Substances

| | Total Weight (g) |
|-------------|-------------------------|
| Copper | 6.02E-1 |
| Nickel | 5.76E-3 |
| Phosphorous | 1.27E-3 |
| Silver | 3.49E-3 |
| Tin | 1.45E-1 |

Silicone Substances

| | Total Weight (g) |
|----------|-------------------------|
| Silicone | 4.00E-1 |

Solder Substances

| | Total Weight (g) |
|--------|-------------------------|
| Silver | 6.83E-3 |
| Tin | 1.88E-1 |

Substrate Substances

| | Total Weight (g) |
|-----------------|-------------------------|
| Beryllium Oxide | 1.33E+0 |



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Thickfilm Substances

Cadmium Oxide
Glass
Gold
Lead Oxide
Silver

Total Weight (g)

1.78E-4
2.62E-2
5.57E-3
3.52E-4
4.69E-2

Wire Substances

Aluminum

Total Weight (g)

1.44E-4



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Substances Present in This Model

| Substance | Total Weight (g) |
|--|------------------|
| Aluminum | 1.89E-4 |
| Barium Titanate | 8.09E-2 |
| Beryllium Oxide | 1.33E+0 |
| Bismuth Titanate | 4.76E-3 |
| Cadmium Oxide | 1.78E-4 |
| Calcium Zirconate | 4.76E-3 |
| Carbon | 6.62E-3 |
| Copper | 6.02E-1 |
| Epoxy | 3.21E-2 |
| Glass | 2.72E-1 |
| Gold | 5.63E-3 |
| Iron | 6.58E+0 |
| Lead Oxide | 3.52E-4 |
| Manganese | 2.72E-2 |
| Manganese Oxide | 4.76E-3 |
| Nickel | 6.45E-2 |
| Palladium | 8.93E-4 |
| Phosphorous | 3.92E-3 |
| Polymeric Resin | 5.76E-1 |
| Silica | 4.76E-3 |
| Silicon | 1.05E-2 |
| Silicone | 4.00E-1 |
| Silver | 7.58E-2 |
| Sulfur | 3.31E-3 |
| Tin | 3.38E-1 |
| Titanium | 3.80E-6 |
| Sum of All Substances Present in This Model (g) | 1.04E+1 |