



Apex Microtechnology Materials Substance Report

Model: PA16

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RoHS Compliant: Yes

Lead Free: No

Bonding Island Substances	Total Weight (g)
Aluminum	1.19E-3
Copper	1.67E-2

Capacitor Substances	Total Weight (g)
Barium Titanate	7.48E-3
Bismuth Titanate	4.40E-4
Calcium Zirconate	4.40E-4
Manganese Oxide	4.40E-4
Nickel	8.80E-5
Palladium	8.25E-5
Silica	4.40E-4
Silver	1.57E-3
Tin	2.20E-5

Die Substances	Total Weight (g)
Aluminum	4.75E-5
Epoxy	6.70E-5
Gold	6.69E-6
Nickel	5.38E-5
Silicon	1.23E-2
Silver	5.05E-4
Tin	5.21E-3
Titanium	2.74E-5

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)

2.14E-4
2.60E-2
5.57E-3
2.49E-4
4.69E-2

Wire Substances

Aluminum

Total Weight (g)

2.33E-4



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Substances Present in This Model

Substance	Total Weight (g)
Aluminum	1.47E-3
Barium Titanate	7.48E-3
Beryllium Oxide	1.33E+0
Bismuth Titanate	4.40E-4
Cadmium Oxide	2.14E-4
Calcium Zirconate	4.40E-4
Carbon	6.62E-3
Copper	6.19E-1
Epoxy	3.21E-2
Glass	2.72E-1
Gold	5.57E-3
Iron	6.58E+0
Lead Oxide	2.49E-4
Manganese	2.72E-2
Manganese Oxide	4.40E-4
Nickel	6.37E-2
Palladium	8.25E-5
Phosphorous	3.92E-3
Polymeric Resin	5.76E-1
Silica	4.40E-4
Silicon	1.23E-2
Silicone	4.00E-1
Silver	5.93E-2
Sulfur	3.31E-3
Tin	3.38E-1
Titanium	2.74E-5

Sum of All Substances Present in This Model (g) 1.03E+1