



Apex Microtechnology Materials Substance Report

Model: PB51

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RoHS Compliant: Yes

Lead Free: No

Bonding Island Substances	Total Weight (g)
Aluminum	2.35E-3
Copper	1.52E-2

Capacitor Substances	Total Weight (g)
Barium Titanate	1.50E-2
Bismuth Titanate	8.80E-4
Calcium Zirconate	8.80E-4
Manganese Oxide	8.80E-4
Nickel	1.76E-4
Palladium	1.65E-4
Silica	8.80E-4
Silver	3.13E-3
Tin	4.40E-5

Die Substances	Total Weight (g)
Aluminum	7.78E-5
Epoxy	3.19E-4
Gold	8.67E-4
Nickel	5.07E-6
Silicon	1.83E-2
Silver	2.95E-3
Tin	2.01E-3
Titanium	2.07E-7

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
2.60E-2
5.57E-3
2.82E-4
4.69E-2

Wire Substances

Aluminum

Total Weight (g)

1.49E-4



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Substances Present in This Model

Substance	Total Weight (g)
Aluminum	2.57E-3
Barium Titanate	1.50E-2
Beryllium Oxide	1.33E+0
Bismuth Titanate	8.80E-4
Cadmium Oxide	1.78E-4
Calcium Zirconate	8.80E-4
Carbon	6.62E-3
Copper	6.17E-1
Epoxy	3.23E-2
Glass	2.72E-1
Gold	6.43E-3
Iron	6.58E+0
Lead Oxide	2.82E-4
Manganese	2.72E-2
Manganese Oxide	8.80E-4
Nickel	6.37E-2
Palladium	1.65E-4
Phosphorous	3.92E-3
Polymeric Resin	5.76E-1
Silica	8.80E-4
Silicon	1.83E-2
Silicone	4.00E-1
Silver	6.33E-2
Sulfur	3.31E-3
Tin	3.35E-1
Titanium	2.07E-7
Sum of All Substances Present in This Model (g)	1.04E+1