



Apex Microtechnology Materials Substance Report

Model: PA90

Print Time: 9/19/2013 9:28:32 AM

RoHS Compliant: Yes

Lead Free: No

Bonding Island Substances

Total Weight (g)

NONE

N/A

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

3.83E-5

Epoxy

1.69E-4

Gold

1.17E-4

Nickel

8.36E-6

Silicon

8.39E-3

Silver

2.54E-3

Tin

8.49E-4

Titanium

3.07E-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



Apex Microtechnology Materials Substance Report

Model: PA90

Print Time: 9/19/2013 9:28:32 AM

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



Apex Microtechnology Materials Substance Report

Model: PA90

Print Time: 9/19/2013 9:28:32 AM

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)

1.06E-4



Apex Microtechnology Materials Substance Report

Model: PA90

Print Time: 9/19/2013 9:28:32 AM

Substances Present in This Model

Substance	Total Weight (g)
Aluminum	1.44E-4
Barium Titanate	7.48E-3
Beryllium Oxide	1.33E+0
Bismuth Titanate	4.40E-4
Cadmium Oxide	1.78E-4
Calcium Zirconate	4.40E-4
Carbon	6.62E-3
Copper	6.02E-1
Epoxy	3.22E-2
Glass	2.72E-1
Gold	5.68E-3
Iron	6.58E+0
Lead Oxide	2.82E-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	8.39E-3
Silicone	4.00E-1
Silver	6.13E-2
Sulfur	3.31E-3
Tin	3.34E-1
Titanium	3.07E-6
Sum of All Substances Present in This Model (g)	1.03E+1