



# Apex Microtechnology Materials Substance Report

**Model:** PA98

**Print Time:** 9/19/2013 9:32:54 AM

**RoHS Compliant:** Yes

**Lead Free:** No

**Bonding Island Substances**

**Total Weight (g)**

NONE

N/A

**Capacitor Substances**

**Total Weight (g)**

Barium Titanate

2.99E-2

Bismuth Titanate

1.76E-3

Calcium Zirconate

1.76E-3

Manganese Oxide

1.76E-3

Nickel

3.52E-4

Palladium

3.30E-4

Silica

1.76E-3

Silver

6.27E-3

Tin

8.80E-5

**Die Substances**

**Total Weight (g)**

Aluminum

5.22E-5

Epoxy

1.03E-4

Gold

6.60E-5

Nickel

2.54E-5

Silicon

1.18E-2

Silver

1.78E-3

Tin

4.59E-3

Titanium

1.03E-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**

	<b>Total Weight (g)</b>
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**

	<b>Total Weight (g)</b>
NONE	N/A

**Lid Substances**

	<b>Total Weight (g)</b>
Glass	1.54E-1
Polymeric Resin	3.60E-1

**Pin Substances**

	<b>Total Weight (g)</b>
Copper	6.02E-1
Nickel	5.76E-3
Phosphorous	1.27E-3
Silver	3.49E-3
Tin	1.45E-1

**Silicone Substances**

	<b>Total Weight (g)</b>
Silicone	4.00E-1

**Solder Substances**

	<b>Total Weight (g)</b>
Silver	6.83E-3
Tin	1.88E-1

**Substrate Substances**

	<b>Total Weight (g)</b>
Beryllium Oxide	1.33E+0



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### **Thickfilm Substances**

Cadmium Oxide  
Glass  
Gold  
Lead Oxide  
Silver

### **Total Weight (g)**

1.78E-4  
2.63E-2  
5.57E-3  
4.21E-4  
4.69E-2

### **Wire Substances**

Aluminum

### **Total Weight (g)**

1.36E-4



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## Substances Present in This Model

Substance	Total Weight (g)
Aluminum	1.88E-4
Barium Titanate	2.99E-2
Beryllium Oxide	1.33E+0
Bismuth Titanate	1.76E-3
Cadmium Oxide	1.78E-4
Calcium Zirconate	1.76E-3
Carbon	6.62E-3
Copper	6.02E-1
Epoxy	3.21E-2
Glass	2.73E-1
Gold	5.63E-3
Iron	6.58E+0
Lead Oxide	4.21E-4
Manganese	2.72E-2
Manganese Oxide	1.76E-3
Nickel	6.39E-2
Palladium	3.30E-4
Phosphorous	3.92E-3
Polymeric Resin	5.76E-1
Silica	1.76E-3
Silicon	1.18E-2
Silicone	4.00E-1
Silver	6.53E-2
Sulfur	3.31E-3
Tin	3.38E-1
Titanium	1.03E-6
<b>Sum of All Substances Present in This Model (g)</b>	<b>1.04E+1</b>