



# Apex Microtechnology Materials Substance Report

**Model:** PA81J

**Print Time:** 9/19/2013 9:24:08 AM

**RoHS Compliant:** Yes

**Lead Free:** No

**Bonding Island Substances**

**Total Weight (g)**

NONE

N/A

**Capacitor Substances**

**Total Weight (g)**

Barium Titanate

3.74E-2

Bismuth Titanate

2.20E-3

Calcium Zirconate

2.20E-3

Manganese Oxide

2.20E-3

Nickel

4.40E-4

Palladium

4.13E-4

Silica

2.20E-3

Silver

7.84E-3

Tin

8.80E-5

**Die Substances**

**Total Weight (g)**

Aluminum

2.50E-5

Epoxy

6.75E-5

Gold

3.02E-5

Silicon

5.38E-3

Silicon Nitride

4.44E-9

Silver

1.16E-3

Tin

1.48E-3

**Encapsulant Substances**

**Total Weight (g)**

NONE

N/A

**Frame Substances**

**Total Weight (g)**

NONE

N/A



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**Header Substances**

	<b>Total Weight (g)</b>
Aluminum	8.65E-4
Barium Oxide	1.26E-1
Carbon	1.10E-2
Chromium	8.65E-4
Cobalt	8.65E-4
Iron	1.09E+1
Manganese	4.85E-2
Nickel	4.38E-1
Phosphorous	4.46E-3
Silica	1.34E-1
Silicon	2.60E-3
Sulfur	5.28E-3

**Lead Frame Substances**

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

**Lid Substances**

	<b>Total Weight (g)</b>
Nickel	1.86E+0

**Pin Substances**

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

**Silicone Substances**

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

**Solder Substances**

	<b>Total Weight (g)</b>
Silver	3.57E-3
Tin	9.84E-2

**Substrate Substances**

	<b>Total Weight (g)</b>
Beryllium Oxide	8.00E-1



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**Thickfilm Substances**

Cadmium Oxide  
Glass  
Gold  
Lead Oxide  
Silver

**Total Weight (g)**

1.07E-4  
7.93E-3  
3.35E-3  
2.06E-4  
2.82E-2

**Wire Substances**

Aluminum

**Total Weight (g)**

1.28E-4



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## Substances Present in This Model

Substance	Total Weight (g)
Aluminum	1.02E-3
Barium Oxide	1.26E-1
Barium Titanate	3.74E-2
Beryllium Oxide	8.00E-1
Bismuth Titanate	2.20E-3
Cadmium Oxide	1.07E-4
Calcium Zirconate	2.20E-3
Carbon	1.10E-2
Chromium	8.65E-4
Cobalt	8.65E-4
Epoxy	6.75E-5
Glass	7.93E-3
Gold	3.38E-3
Iron	1.09E+1
Lead Oxide	2.06E-4
Manganese	4.85E-2
Manganese Oxide	2.20E-3
Nickel	2.30E+0
Palladium	4.13E-4
Phosphorous	4.46E-3
Silica	1.36E-1
Silicon	7.98E-3
Silicon Nitride	4.44E-9
Silver	4.08E-2
Sulfur	5.28E-3
Tin	1.00E-1
<b>Sum of All Substances Present in This Model (g)</b>	<b>1.45E+1</b>