



# Apex Microtechnology

## Materials Substance Report

**Model:** MP38CL

**Print Time:** 9/19/2013 10:17:47 AM

**RoHS Compliant:** Yes

**Lead Free:** No

**Bonding Island Substances**

**Total Weight (g)**

NONE

N/A

**Capacitor Substances**

**Total Weight (g)**

Barium Titanate

7.34E-2

Bismuth Titanate

4.32E-3

Calcium Zirconate

4.32E-3

Magnesium Oxide

4.32E-3

Nickel

8.64E-4

Palladium

8.12E-4

Silica

4.32E-3

Silver

1.54E-2

Tin

7.02E-4



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<b>Die Substances</b>	<b>Total Weight (g)</b>
Alumina	9.75E-2
Aluminum	1.32E-2
Antimony Trioxide	2.30E-4
Barium Oxide	1.05E-5
Barium Titanate	4.41E-6
Bismuth Trioxide	3.30E-5
Boron Oxide	6.17E-5
Bromine Resin	1.64E-4
Carbon Black	9.79E-4
Catalyst	1.34E-2
Chromium	2.49E-5
Chromium Oxide	4.87E-5
Cobalt	7.82E-5
Copper	1.99E+0
Cupric Oxide	4.39E-5
Curing Agent	3.09E-4
Doped Silicon	4.58E-2
Epoxy	1.69E-3
Epoxy Resins	1.36E-1
Gold	2.23E-3
Iron	8.24E-3
Lead	2.29E-2
Lead Oxide	3.09E-4
Magnesium Oxide	2.77E-4
Manganese	9.53E-5
Manganese Oxide	5.45E-5
Metal Hydroxide	1.39E-3
Nickel	1.27E-2
Palladium	1.34E-4
Phosphorous	2.66E-5
Ruthenium Dioxide	2.21E-4
Silica	1.12E+0
Silicon	1.42E-2
Silver	2.34E-2
Sulfur	4.91E-7
Tin	2.84E-2



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Zinc

2.80E-5

**Encapsulant Substances**

**Total Weight (g)**

NONE

N/A

**Frame Substances**

**Total Weight (g)**

NONE

N/A

**Header Substances**

**Total Weight (g)**

NONE

N/A

**Lead Frame Substances**

**Total Weight (g)**

NONE

N/A

**Lid Substances**

**Total Weight (g)**

NONE

N/A

**Pin Substances**

**Total Weight (g)**

Copper

1.08E+0

Liquid Crystal Polymer

5.96E-1

Nickel

9.08E-3

Phosphorous

2.27E-3

Tin

7.38E-2

**Silicone Substances**

**Total Weight (g)**

NONE

N/A

**Solder Substances**

**Total Weight (g)**

NONE

N/A



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**Substrate Substances**

	<b>Total Weight (g)</b>
Alumina	1.71E-1
Aluminum	7.85E+0
Copper	4.03E-1
Epoxy	1.46E-1
Polyimide	3.18E-1
Silica	1.06E-3
Silver	6.69E-3
Tin	1.61E-1

**Thickfilm Substances**

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

**Wire Substances**

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



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## Substances Present in This Model

Substance	Total Weight (g)
Alumina	2.68E-1
Aluminum	7.87E+0
Antimony Trioxide	2.30E-4
Barium Oxide	1.05E-5
Barium Titanate	7.34E-2
Bismuth Titanate	4.32E-3
Bismuth Trioxide	3.30E-5
Boron Oxide	6.17E-5
Bromine Resin	1.64E-4
Calcium Zirconate	4.32E-3
Carbon Black	9.79E-4
Catalyst	1.34E-2
Chromium	2.49E-5
Chromium Oxide	4.87E-5
Cobalt	7.82E-5
Copper	3.47E+0
Cupric Oxide	4.39E-5
Curing Agent	3.09E-4
Doped Silicon	4.58E-2
Epoxy	1.47E-1
Epoxy Resins	1.36E-1
Gold	2.23E-3
Iron	8.24E-3
Lead	2.29E-2
Lead Oxide	3.09E-4
Liquid Crystal Polymer	5.96E-1
Magnesium Oxide	4.60E-3
Manganese	9.53E-5
Manganese Oxide	5.45E-5
Metal Hydroxide	1.39E-3
Nickel	2.27E-2
Palladium	9.46E-4
Phosphorous	2.30E-3
Polyimide	3.18E-1
Ruthenium Dioxide	2.21E-4



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## Substances Present in This Model

Substance	Total Weight (g)
Silica	1.13E+0
Silicon	1.42E-2
Silver	4.55E-2
Sulfur	4.91E-7
Tin	2.64E-1
Zinc	2.80E-5

**Sum of All Substances Present in This Model (g)** 1.45E+1