



# Apex Microtechnology Materials Substance Report

**Model:** MSA240KC

**Print Time:** 9/19/2013 10:22:04 AM

**RoHS Compliant:** Yes

**Lead Free:** No

**Bonding Island Substances**

**Total Weight (g)**

NONE

N/A

**Capacitor Substances**

**Total Weight (g)**

Barium Titanate

7.22E-1

Bismuth Titanate

4.25E-2

Calcium Zirconate

4.25E-2

Magnesium Oxide

4.25E-2

Nickel

8.50E-3

Palladium

7.98E-3

Silica

4.25E-2

Silver

1.51E-1

Tin

2.12E-3



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<b>Die Substances</b>	<b>Total Weight (g)</b>
Acrylic Resin	7.89E-5
Alumina	2.80E-1
Aluminum	2.64E-2
Antimony Trioxide	1.64E-3
Barium Oxide	2.95E-5
Barium Titanate	2.50E-5
Bismuth Trioxide	5.45E-5
Boron Oxide	5.45E-5
Bromine Resin	8.19E-4
Carbon Black	1.21E-3
Catalyst	2.19E-2
Chromium	5.14E-5
Cobalt	1.22E-5
Copper	4.82E+0
Doped Silicon	9.23E-2
Epoxy	5.16E-3
Epoxy Resins	3.52E-1
Gold	1.94E-3
Iron	7.68E-3
Lead	5.42E-2
Lead Oxide	6.52E-4
Manganese	1.47E-5
Metal Hydroxide	1.54E-2
Nickel	1.19E-2
Palladium	4.88E-4
Phosphorous	4.10E-5
Ruthenium Dioxide	8.15E-4
Silica	2.47E+0
Silver	1.18E-2
Tin	4.82E-2
Zinc	3.15E-1

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

<b>Frame Substances</b>	<b>Total Weight (g)</b>
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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

2.08E+0

Liquid Crystal Polymer

1.15E+0

Nickel

1.75E-2

Phosphorous

4.39E-3

Tin

1.43E-1

**Silicone Substances**

**Total Weight (g)**

NONE

N/A

**Solder Substances**

**Total Weight (g)**

NONE

N/A

**Substrate Substances**

**Total Weight (g)**

Alumina

6.01E-1

Aluminum

2.76E+1

Copper

1.41E+0

Epoxy

5.13E-1

Polyimide

1.12E+0

Silica

3.72E-3

Silver

2.35E-2

Tin

5.65E-1

**Thickfilm Substances**

**Total Weight (g)**

NONE

N/A

**Wire Substances**

**Total Weight (g)**



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NONE

N/A



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## Substances Present in This Model

Substance	Total Weight (g)
Acrylic Resin	7.89E-5
Alumina	8.82E-1
Aluminum	2.76E+1
Antimony Trioxide	1.64E-3
Barium Oxide	2.95E-5
Barium Titanate	7.22E-1
Bismuth Titanate	4.25E-2
Bismuth Trioxide	5.45E-5
Boron Oxide	5.45E-5
Bromine Resin	8.19E-4
Calcium Zirconate	4.25E-2
Carbon Black	1.21E-3
Catalyst	2.19E-2
Chromium	5.14E-5
Cobalt	1.22E-5
Copper	8.32E+0
Doped Silicon	9.23E-2
Epoxy	5.18E-1
Epoxy Resins	3.52E-1
Gold	1.94E-3
Iron	7.68E-3
Lead	5.42E-2
Lead Oxide	6.52E-4
Liquid Crystal Polymer	1.15E+0
Magnesium Oxide	4.25E-2
Manganese	1.47E-5
Metal Hydroxide	1.54E-2
Nickel	3.80E-2
Palladium	8.47E-3
Phosphorous	4.43E-3
Polyimide	1.12E+0
Ruthenium Dioxide	8.15E-4
Silica	2.52E+0
Silver	1.87E-1
Tin	7.58E-1



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## Substances Present in This Model

<b>Substance</b>	<b>Total Weight (g)</b>
Zinc	3.15E-1
<b>Sum of All Substances Present in This Model (g)</b>	<b>4.48E+1</b>