



Apex Microtechnology Materials Substance Report

Model: MP103FC

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RoHS Compliant: Yes

Lead Free: No

Bonding Island Substances

Copper
Tin

Total Weight (g)

5.40E-3
1.80E-3

Capacitor Substances

Barium Titanate
Bismuth Titanate
Calcium Zirconate
Magnesium Oxide
Nickel
Palladium
Silica
Silver
Tin

Total Weight (g)

4.30E-1
2.53E-2
2.53E-2
2.53E-2
5.06E-3
4.74E-3
2.53E-2
9.01E-2
1.26E-3



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Die Substances	Total Weight (g)
Alumina	3.26E-1
Aluminum	9.76E-3
Antimony Trioxide	1.29E-2
Barium Oxide	4.95E-5
Barium Titanate	1.03E-5
Bismuth Trioxide	5.98E-5
Boron Oxide	5.98E-5
Bromine	1.17E-5
Carbon	1.30E-3
Carbon Black	5.70E-3
Catalyst	2.32E-3
Chlorine	1.17E-5
Chromium	4.68E-5
Cobalt	1.35E-5
Copper	1.50E+0
Curing Agent	1.13E-4
Doped Silicon	3.08E-2
Epoxy	6.32E-3
Epoxy Resins	1.23E-1
Flame Retardant	2.83E-4
Gold	2.40E-3
Iron	8.63E-3
Lead	5.00E-3
Lead Oxide	8.11E-4
Manganese	2.17E-5
Metal Hydroxide	7.04E-4
Nickel	1.58E-2
Palladium	7.33E-4
Phosphorous	1.31E-3
Release Agent	4.71E-5
Ruthenium Dioxide	1.01E-3
Silica	4.70E-1
Silicon	6.57E-3
Silicone	2.60E-3
Silver	1.11E-2
Stress Absorbent	2.36E-4



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Tin	2.35E-2
Zinc	3.15E-1

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	1.51E+0
Liquid Crystal Polymer	8.34E-1
Nickel	1.27E-2
Phosphorous	3.17E-3
Tin	1.03E-1

Silicone Substances	Total Weight (g)
NONE	N/A

Solder Substances	Total Weight (g)
NONE	N/A



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Substrate Substances

	Total Weight (g)
Alumina	2.40E-1
Aluminum	1.10E+1
Copper	5.65E-1
Epoxy	2.05E-1
Polyimide	4.45E-1
Silica	1.48E-3
Silver	9.39E-3
Tin	2.25E-1

Thickfilm Substances

	Total Weight (g)
NONE	N/A

Wire Substances

	Total Weight (g)
NONE	N/A



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Substances Present in This Model

Substance	Total Weight (g)
Alumina	5.65E-1
Aluminum	1.10E+1
Antimony Trioxide	1.29E-2
Barium Oxide	4.95E-5
Barium Titanate	4.30E-1
Bismuth Titanate	2.53E-2
Bismuth Trioxide	5.98E-5
Boron Oxide	5.98E-5
Bromine	1.17E-5
Calcium Zirconate	2.53E-2
Carbon	1.30E-3
Carbon Black	5.70E-3
Catalyst	2.32E-3
Chlorine	1.17E-5
Chromium	4.68E-5
Cobalt	1.35E-5
Copper	3.57E+0
Curing Agent	1.13E-4
Doped Silicon	3.08E-2
Epoxy	2.11E-1
Epoxy Resins	1.23E-1
Flame Retardent	2.83E-4
Gold	2.40E-3
Iron	8.63E-3
Lead	5.00E-3
Lead Oxide	8.11E-4
Liquid Crystal Polymer	8.34E-1
Magnesium Oxide	2.53E-2
Manganese	2.17E-5
Metal Hydroxide	7.04E-4
Nickel	3.36E-2
Palladium	5.48E-3
Phosphorous	4.48E-3
Polyimide	4.45E-1
Release Agent	4.71E-5



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Substances Present in This Model

Substance	Total Weight (g)
Ruthenium Dioxide	1.01E-3
Silica	4.97E-1
Silicon	6.57E-3
Silicone	2.60E-3
Silver	1.11E-1
Stress Absorbent	2.36E-4
Tin	3.55E-1
Zinc	3.15E-1

Sum of All Substances Present in This Model (g) 1.87E+1