



Apex Microtechnology Materials Substance Report

Model: PA119CE

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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	1.10E-4

Die Substances	Total Weight (g)
Aluminum	7.29E-5
Chromium	2.33E-5
Epoxy	7.95E-5
Gold	3.93E-5
Nickel	1.30E-3
Silicon	2.51E-2
Silver	1.51E-3
Tin	7.73E-3

Encapsulant Substances	Total Weight (g)
NONE	N/A

Frame Substances	Total Weight (g)
NONE	N/A



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Header Substances

	Total Weight (g)
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

	Total Weight (g)
NONE	N/A

Lid Substances

	Total Weight (g)
Nickel	1.86E+0

Pin Substances

	Total Weight (g)
NONE	N/A

Silicone Substances

	Total Weight (g)
NONE	N/A

Solder Substances

	Total Weight (g)
Silver	3.57E-3
Tin	9.84E-2

Substrate Substances

	Total Weight (g)
Beryllium Oxide	8.00E-1



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Thickfilm Substances

	Total Weight (g)
Cadmium Oxide	1.07E-4
Glass	1.59E-2
Gold	3.35E-3
Lead Oxide	2.75E-4
Silver	2.82E-2

Wire Substances

	Total Weight (g)
Aluminum	4.59E-4

Substances Present in This Model

Substance	Total Weight (g)
Aluminum	1.40E-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	8.88E-4
Cobalt	8.65E-4
Epoxy	7.95E-5
Glass	1.59E-2
Gold	3.39E-3
Iron	1.09E+1
Lead Oxide	2.75E-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	2.77E-2
Silver	4.11E-2
Sulfur	5.28E-3
Tin	1.06E-1



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Sum of All Substances Present in This Model (g) 1.46E+1