



Apex Microtechnology Materials Substance Report

Model: VRE310AS

Print Time: 9/19/2013 10:13:24 AM

RoHS Compliant: Yes

Lead Free: No

Bonding Island Substances	Total Weight (g)
NONE	N/A
Capacitor Substances	Total Weight (g)
NONE	N/A
Die Substances	Total Weight (g)
Aluminum	6.28E-6
Epoxy	4.96E-5
Gold	3.38E-6
Silicon	1.76E-3
Silver	1.14E-4
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)
Alumina	2.42E-1
Calcium Oxide	1.30E-3
Iron Oxide	2.70E-3
Manganese Oxide	5.40E-3
Silica	8.10E-3
Titanium Oxide	9.40E-3



Apex Microtechnology

Materials Substance Report

Model: VRE310AS

Print Time: 9/19/2013 10:13:24 AM

Pin Substances

	Total Weight (g)
Copper	1.34E-1
Lead	3.52E-5
Phosphorous	2.80E-4
Silver	2.16E-4
Tin	1.76E-2
Zinc	2.16E-4

Silicone Substances

	Total Weight (g)
Epoxy	3.60E-2
Magnesium Silicate Hydrous	1.80E-2
Silica	1.80E-2

Solder Substances

	Total Weight (g)
NONE	N/A

Substrate Substances

	Total Weight (g)
Alumina	2.18E-1
Calcium Oxide	1.20E-3
Iron Oxide	2.40E-3
Manganese Oxide	4.90E-3
Silica	7.30E-3
Titanium Oxide	8.50E-3

Thickfilm Substances

	Total Weight (g)
Cadmium Oxide	2.15E-5
Glass	2.69E-3
Gold	6.69E-4
Lead Oxide	5.29E-5
Silver	5.64E-3

Wire Substances

	Total Weight (g)
Gold	1.24E-4



Apex Microtechnology Materials Substance Report

Model: VRE310AS

Print Time: 9/19/2013 10:13:24 AM

Substances Present in This Model

Substance	Total Weight (g)
Alumina	4.60E-1
Aluminum	6.28E-6
Cadmium Oxide	2.15E-5
Calcium Oxide	2.50E-3
Copper	1.34E-1
Epoxy	3.60E-2
Glass	2.69E-3
Gold	7.97E-4
Iron Oxide	5.10E-3
Lead	3.52E-5
Lead Oxide	5.29E-5
Magnesium Silicate Hydrous	1.80E-2
Manganese Oxide	1.03E-2
Phosphorous	2.80E-4
Silica	3.34E-2
Silicon	1.76E-3
Silver	5.97E-3
Tin	1.76E-2
Titanium Oxide	1.79E-2
Zinc	2.16E-4
Sum of All Substances Present in This Model (g)	7.47E-1