



Material Declaration and ICP Analysis

Product Group: Vishay Siliconix

Part Number : SI4816BDY-T1-E3
Package Type: SOIC-8 BW
Package Total Mass (g): 0.08639

Component	Substance	CAS Number	Amount of Substance (g)	Percent (%)	ppm
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Semiconductor Device

Silicon Chip	Doped Silicon	7440-21-3	0.00760	8.80	87,971
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Lead Frame

Base Metal	Copper	7440-50-8	0.02907	33.65	336,488
Base Metal	Zinc	7440-66-6	0.00021	0.25	2,501
Base Metal	Phosphorous	7723-14-0	0.00021	0.25	2,501
Base Metal	Iron	7439-89-6	0.00030	0.34	3,449

Bond Wire

Metallurgy	Copper	7440-50-8	0.00013	0.14	1,446
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Die Attach Adhesive

Conductive Material	Silver	7440-22-4	0.00070	0.81	8,105
Polymer	Epoxy Resin	25068-38-6	0.00047	0.54	5,403

Mold Compound

Epoxy	Epoxy Resin	29690-82-2	0.00376	4.35	43,523
Resin	Phenol Resin	9003-35-4	0.00329	3.81	38,082
Filler	Fused Silica	60676-86-0	0.03619	41.89	418,905
Flame Retardant Polymer	Aluminum Hydroxide	21645-51-2	0.00376	4.35	43,523

Solder Plating

Plating	Tin	7440-31-5	0.00070	0.81	8,103
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Test results for RoHS banned substances/compounds:

Substance/Compounds	Test Method	Results
Cadmium	EN1122, Method B:2001 (analysis by ICP-AES techniques)	ND
Mercury	EN1122, Method B:2001 (analysis by ICP-AES techniques)	ND
Chromium	EN1122, Method B:2001 (analysis by ICP-AES techniques)	ND
Asbestos	EPA-600/M4-82-020, Dec 1982	ND
Lead	EN1122, Method B:2001 (analysis by ICP-AES techniques)	ND
Specified organobromine compounds	EPA-600 Method 8260B, Rev 2, Dec.1996	ND
PVC and PVC blends	FTIR	ND

ND= Not Detected (Less than 2 ppm)