



Material Declaration Sheet

Vishay Intertechnology

Date 6/1/2018

Part / Product Family Details

Part / Family Series	RoHS Compliance Status	RoHS Compliance Date Code dd-mmm-yyyy	Total product Weight (mg)	Value Range	3rd Party Lab ICP Test Report Available	Manufacturing Location	Number of Exemptions Used
SMM0207 series	YES	01-Sep-2004	79.268	All R values	Yes	Germany	0

Technical Information

Terminal Plating / Grid Array Material	Terminal Base Alloy	JESD-97 Pb-Free Material Code Marking	J-STD-20D MSL Rating	Reflow Peak Process Body Temperature	Reflow Maximum number of cycles	Reflow Max. Time at Peak Temperature (sec)	Soldering Compatibility (SnPb/Pb-Free)
Matte Sn	Other	e3		260 °C	3	40	Backward & Forward

Material Composition

Homogenous Material Name	Material Classification	Substance Name	CAS number	Weight of Substance (mg)	With respect to Homogenous Material		% with respect to Total Product Weight	RoHS Exemptions Used
					%	ppm		
Ceramic Core	Ceramics / glass	Aluminium Oxide	1344-28-1	41.2000000				
		Barium Oxide	1304-28-5	34.9000000	84.7087	847087.0	44.0279	0 - None
		Magnesiumoxide	1309-48-4	1.0300000	2.5000	25000.0	1.2994	0 - None
		Miscellaneous	System	0.8200000	1.9903	19903.0	1.0345	0 - None
		Miscellaneous	System	0.3700000	0.8981	8981.0	0.4668	0 - None
		Silicon dioxide	7631-86-9	4.0800000	9.9029	99029.0	5.1471	0 - None
EP-QD-40	Other duromer			3.7500000				
		Color Pigment	147-14-8	0.0200000	0.5333	5333.0	0.0252	0 - None
		Epoxy resin	25068-38-6	2.2500000	60.0000	60000.0	2.8385	0 - None
		Silica	7631-86-9	1.4800000	39.4667	394667.0	1.8671	0 - None
Nickel alloy layer	Nickel alloys			0.1780000				
		Aluminium [metal]	7429-90-5	0.0180000	10.1124	101124.0	0.0227	0 - None
		Chromium	7440-47-3	0.0650000	36.5169	365169.0	0.0820	0 - None
		Nickel	7440-02-0	0.0950000	53.3708	533708.0	0.1198	0 - None
Nickel plating	Nickel alloys			0.2000000				
		Miscellaneous	System	0.0002000	0.1000	1000.0	0.0003	0 - None
		Nickel	7440-02-0	0.1998000	99.9000	999000.0	0.2521	0 - None
Sn99.9	Other special metals			4.5400000				
		Miscellaneous	System	0.0045400	0.1000	1000.0	0.0057	0 - None
		Tin	7440-31-5	4.5354600	99.9000	999000.0	5.7217	0 - None
Steel	unalloyed, low alloyed			29.4000000				
		Carbon	7440-44-0	0.0294000	0.1000	1000.0	0.0371	0 - None
		Iron	7439-89-6	29.2089000	99.3500	993500.0	36.8483	0 - None
		Manganese	7439-96-5	0.1617000	0.5500	5500.0	0.2040	0 - None

EU-RoHS Directive-2011/65/EU MCV of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and MCV of 0.01% by mass cadmium

Exemption Used NONE

Note :- (i) All information is based on data received from our vendors & subjected to change without prior notice.
(ii) Substance weight are derived from MSDS.

Build Vishay
into your Design

ONE OF THE WORLD'S LARGEST MANUFACTURERS OF DISCRETE SEMICONDUCTORS AND PASSIVE COMPONENTS

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components