



Material Declaration Sheet

Vishay Inter-technology

Date 10/26/2020

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
VR25 series	YES WITH EXEMPTION	01-Oct-2004	212.0094	All R values	Yes		1

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)
Pure matte tin	CU Alloy	e3	Not Applicable	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		
Ceramics	Ceramics / glass	Aluminium Oxide	1344-28-1	41.0000000	75.2927	752927	14.56068	0 - None
		Barium oxide	1304-28-5	30.8700000	5.5610	55610	1.07542	0 - None
		Magnesium oxide	1309-48-4	0.9800000	2.3902	23902	0.46224	0 - None
		Miscellaneous	System	0.4800000	1.1707	11707	0.22641	0 - None
		Silicon dioxide	7631-86-9	6.3900000	15.5854	155854	3.01402	0 - None
						128.1000000		
Cu-ETP1	Copper	Copper	7440-50-8	127.9719000	99.9000	999000	60.36143	0 - None
		Miscellaneous	System	0.1281000	0.1000	1000	0.06042	0 - None
EP-QD-60	other duromer			5.0000000				
		Copper Phthalo	523-42-2	0.4000000	8.0000	80000	0.18867	0 - None
		Epoxy Resin	25068-38-6	1.4000000	28.0000	280000	0.66035	0 - None
		Quartz	14808-60-7	3.0000000	60.0000	600000	1.41503	0 - None
		UF resin	9011-05-6	0.2000000	4.0000	40000	0.09434	0 - None
Glass layer	ceramic/glass			0.4000000				
		Aluminum oxide	1344-28-1	0.2700000	67.5000	675000	0.12735	0 - None
		Lead Silicate	10099-76-0	0.1000000	25.0000	250000	0.04717	7(c)-I
		Ruthenium dioxide	12036-10-1	0.0300000	7.5000	75000	0.01415	0 - None
Nickel plating	nickel alloys			0.6100000				
		Miscellaneous	System	0.0006100	0.1000	1000	0.00029	0 - None
Sn99.9	Other special metal	Nickel	7440-02-0	0.6093900	99.9000	999000	0.28744	0 - None
				3.9000000				
Steel	uSystemloyed, low alloyed	Miscellaneous	System	0.0039000	0.1000	1000	0.00184	0 - None
		Tin	7440-31-5	3.8961000	99.9000	999000	1.83770	0 - None
				32.9994000				
		Aluminium	7429-90-5	0.1000000	0.3030	3030	0.04717	0 - None
		Carbon	7440-44-0	0.0900000	0.2727	2727	0.04245	0 - None
		Iron	7439-89-6	32.3994000	98.1818	981818	15.28206	0 - None
		Manganese	7439-96-5	0.2100000	0.6364	6364	0.09905	0 - None
		Phosphorus	7723-14-0	0.1000000	0.3030	3030	0.04717	0 - None
		Sulphur	7704-34-9	0.1000000	0.3030	3030	0.04717	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 7(c)-I - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

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.

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