



# Material Declaration Sheet

Vishay Inter-technology

Date: 6/2/2021

## Part / Product Family Details

Part / Family Series	RoHS Compliance Status	RoHS Compliance Date Code dd-mm-yyyy	Total product Weight (mg)	Value Range	3rd Party Lab ICP Test Report Available	Manufacturing Location	Number of Exemptions Used
HVR25 Series (All R values)	YES	10-Jan-2004	207	All R values	Yes		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	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 7.2			43.00000000				
		Aluminium oxide	1344-28-1	36.46000000	84.79070	847907	17.613527	0 - None
		Barium oxide	1304-28-5	1.07000000	2.48837	24884	0.516908	0 - None
		Magnesium oxide	1309-48-4	1.21000000	2.81395	28140	0.584541	0 - None
		Silicon dioxide	7631-86-9	4.26000000	9.90698	99070	2.057971	0 - None
Cu-ETP1	Copper 3.1			123.33000000				
		Copper	7440-50-8	123.20667000	99.90000	999000	59.520130	0 - None
		miscellaneous	System	0.12333000	0.10000	1000	0.059580	0 - None
EP-QD 70	Other Duromer 5.4.3			4.40000000				
		Copper phthalo pigment	523-42-2	0.30000000	6.81818	68182	0.144928	0 - None
		Epoxy resin	25068-38-6	1.06000000	24.09091	240909	0.512077	0 - None
		Quartz	14808-60-7	3.04000000	69.09091	690909	1.468599	0 - None
Nickel alloy	Nickel alloy 3.4			0.30000000				
		Chromium	7440-47-3	0.13000000	43.33333	433333	0.062802	0 - None
		Nickel	7440-02-0	0.17000000	56.66667	566667	0.082126	0 - None
Nickel plating	Nickel alloy 3.4			0.30000000				
		Nickel	7440-02-0	0.29970000	99.90000	999000	0.144783	0 - None
		miscellaneous	System	0.00030000	0.10000	1000	0.000145	0 - None
Sn99.9	other special metal			3.67000000				
		Tin	7440-31-5	3.66633000	99.90000	999000	1.771174	0 - None
		miscellaneous	System	0.00367000	0.10000	1000	0.001773	0 - None
ST-410	Unalloyed low alloyed 1.1.1			32.00000000				
		Aluminium	7429-90-5	0.10000000	0.31250	3125	0.048309	0 - None
		Carbon	7440-44-0	0.10000000	0.31250	3125	0.048309	0 - None
		Iron	7439-89-6	31.50000000	98.43750	984375	15.217391	0 - None
		Manganese	7439-96-5	0.10000000	0.31250	3125	0.048309	0 - None
		Phosphorus	7723-14-0	0.10000000	0.31250	3125	0.048309	0 - None
		Sulphur	7704-34-9	0.10000000	0.31250	3125	0.048309	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.