



Material Declaration Sheet

Vishay Inter-technology

Date 12/2/2020

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
MRS25 Series	YES	21-Jun-2005	221.117	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		
Alumina Substrate	Ceramics / glass	Aluminium oxide	1344-28-1	41.8400000	90.08126	900813	17.04527	0 - None
		Silicon dioxide	7631-86-9	37.6900000	9.91874	99187	1.87683	0 - None
Cu-ETP 1	Copper alloys			151.3810000				
		Copper	7440-50-8	37.6900000	99.89827	998983	68.39230	0 - None
Electroless Ni-P	Nickel Alloy	Oxygen	7782-44-7	0.1540000	0.10173	1017	0.06965	0 - None
				0.2590000				
EP-QD 60	Other duromers	Carbon	7440-44-0	0.0012950	0.50000	5000	0.00059	0 - None
		Nickel	7440-02-0	0.2266250	87.50000	875000	0.10249	0 - None
		White phosphorous	12185-10-3	0.0310800	12.00000	120000	0.01406	0 - None
Nickel Alloy	Nickel Alloy			6.2400000				
		Epoxy Resin	25068-38-6	1.9968000	32.00000	320000	0.90305	0 - None
		Filler	14808-60-7	3.7440000	60.00000	600000	1.69322	0 - None
Sn99	Other special metals	Pigment	147-14-8	0.4992000	8.00000	80000	0.22576	0 - None
				0.0700000				
St 4 LGBK	Unalloyed, low alloyed steel	Chromium	7440-47-3	0.0280000	40.00000	400000	0.01266	0 - None
		Nickel	7440-02-0	0.0420000	60.00000	600000	0.01899	0 - None
				8.8040000				
St 4 LGBK	Unalloyed, low alloyed steel	Lead	7439-92-1	0.0008804	0.01000	100	0.00040	0 - None
		Tin	7440-31-5	8.7995980	99.95000	999500	3.97961	0 - None
		Miscellaneous	System	0.0035216	0.04000	400	0.00159	0 - None
				12.5230000				
		Aluminum	7429-90-5	0.0050092	0.04000	400	0.00227	0 - None
		Carbon	7440-44-0	0.0062615	0.05000	500	0.00283	0 - None
		Iron	7439-89-6	12.4941971	99.77000	997700	5.65049	0 - None
Manganese	7439-96-5	0.0125230	0.10000	1000	0.00566	0 - None		
Silicon	7440-21-3	0.0025046	0.02000	200	0.00113	0 - None		
Sulfur	7704-34-9	0.0025046	0.02000	200	0.00113	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.