



Material Declaration Sheet

Vishay Inter-technology

Date

2/10/2023

Part / Product Family Details

Vishay Part Number	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
293D105X0020A2TE3	YES		30.7999996	BOM of 1UF - 20VDC A case	Yes	Vishay Israel Ltd., New Industrial Park, POB 87	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 w/ Nickel underplate	Alloy 42		1	260 ° C	3	40	

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		
Adhesive_Silver epoxy				0.71400				
		Epoxy Resine	25068-38-6	0.09282	13.00	130000	0.30	0 - None
		Phenol resin	26402-79-9	0.01428	2.00	20000	0.05	0 - None
		Silver	7440-22-4	0.60690	85.00	850000	1.97	0 - None
Cathode layer				0.52970				
		Manganese Dioxide	13113-13-9	0.52970	100.00	1000000	1.72	0 - None
				13.83726				
Encapsulation_Mold compound				0.12454	0.90	9000	0.40	0 - None
		Diantimony Trioxide	1309-64-4	0.12454	30.00	300000	13.48	0 - None
		Cristobalite	14464-46-1	4.15118	1.30	13000	0.58	0 - None
		Bisphenol A Diglycidyl Ether, Brominated	40039-93-8	0.17988	67.80	678000	30.46	0 - None
		Silica, Vitreous	60676-86-0	9.38166				
				5.18600				
Lead Frame_Alloy 42				3.02240	58.28	582800	9.81	0 - None
		Iron	7439-89-6	3.02240	0.50	5000	0.08	0 - None
		Manganese	7439-96-5	0.02593	41.00	410000	6.90	0 - None
		Nickel	7440-02-0	2.12626	0.20	2000	0.03	0 - None
		Silicon	7440-21-3	0.01037	0.02	200	0.00	0 - None
		Carbon	7440-44-0	0.00104				
				1.31904				
Outer cathode layer				1.31904	100.00	1000000	4.28	0 - None
		Silver	7440-22-4	1.31904				
				8.50000				
Pellet				8.50000	100.00	1000000	27.60	0 - None
		Tantalum	7440-25-7	8.50000				
				0.71400				
Solder layer				0.00007	0.01	100	0.00	0 - None
		Aluminium	7429-90-5	0.00014	0.02	200	0.00	0 - None
		Iron	7439-89-6	0.71292	99.85	998490	2.31	0 - None
		Tin	7440-31-5	0.00000	0.00	7	0.00	0 - None
		Copper	7440-50-8	0.00007	0.01	100	0.00	0 - None
		Zinc	7440-66-6	0.00079	0.11	1103	0.00	0 - None
		System						

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.

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