



Material Declaration Sheet

Vishay Inter-technology

Date 12/21/2020

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
TNPW0603 e3 series	YES	01-Jan-2007	2.1726468	All R value	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)
Pure matte tin - Ni barrier	Other	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		
Ceramic Substrate	Ceramics / glass			1.8737500				
		Aluminium Oxide	1344-28-1	1.7920000	95.63709	956371	82.48004	0 - None
		Glass former	System	0.0272500	1.45430	14543	1.25423	0 - None
		Silicon Dioxide	60676-86-0	0.0545000	2.90861	29086	2.50846	0 - None
EP-QD 25	Other duromers			0.0633600				
		Epoxy resin	25068-38-6	0.0329472	52.00000	520000	1.51645	0 - None
		Pigment	68187-11-1	0.0152064	24.00000	240000	0.69990	0 - None
		Quartz	14808-60-7	0.0152064	24.00000	240000	0.69990	0 - None
Nickel alloy	Nickel alloys			0.0000052				
		Chromium	7440-47-3	0.0000021	40.38462	403846	0.00010	0 - None
		Nickel	7440-02-0	0.0000031	59.61538	596154	0.00014	0 - None
Silver inner electrical contact	Other special metals			0.0624400				
		Glass	System	0.0047900	7.67136	76714	0.22047	0 - None
		Palladium	7440-05-3	0.0069000	11.05061	110506	0.31758	0 - None
		Silver	7440-22-4	0.0507500	81.27803	812780	2.33586	0 - None
Tin outer electrical contact	Other special metals			0.1730916				
		Chromium	7440-47-3	0.0000020	0.00116	12	0.00009	0 - None
		Copper	7440-50-8	0.0000118	0.00682	68	0.00054	0 - None
		Nickel	7440-02-0	0.0647778	37.42400	374240	2.98152	0 - None
		Tin	7440-31-5	0.1083000	62.56803	625680	4.98470	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.

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