



Material Declaration Sheet

Vishay Intertechnology

Date 5/17/2019

Part / Product Family Details

Part / Family Series	RoHS Compliance Status	RoHS Compliance Date Code	Total product Weight (mg)	Value Range	Product Type	Manufacturing Location	Number of Exemptions Used
TNPW1206 e3 series	YES	01-Jan-2007	8.7906692	All R value	Resistor	Vishay BCcomponents Bevschlag	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	Aluminium Oxide	1344-28-1	7.61400	95.63	956304	86.61	0 - None
		Silicon Dioxide	60676-86-0	0.23200	2.91	29139	2.64	0 - None
		Glass former	System	0.11590	1.46	14557	1.32	0 - None
EP-QD 25	Other duromers			0.25920				
		Epoxy resin	25068-38-6	0.13478	52.00	520000	1.53	0 - None
		Pigment	68187-11-1	0.06221	24.00	240000	0.71	0 - None
Nickel alloy	Nickel alloys	Quartz	14808-60-7	0.06221	24.00	240000	0.71	0 - None
				0.00002				
		Chromium	7440-47-3	0.00001	40.00	400000	0.00	0 - None
Silver inner electrical contact	Other special metals	Nickel	7440-02-0	0.00001	60.00	600000	0.00	0 - None
				0.17540				
		Palladium	7440-05-3	0.02565	14.62	146237	0.29	0 - None
Tin outer electrical contact	Other special metals	Silver	7440-22-4	0.13479	76.85	768472	1.53	0 - None
		Glass	System	0.01496	8.53	85291	0.17	0 - None
				0.39415				
		Chromium	7440-47-3	0.00000	0.00	12	0.00	0 - None
		Copper	7440-50-8	0.00003	0.01	70	0.00	0 - None
		Nickel	7440-02-0	0.14782	37.50	375030	1.68	0 - None
		Tin	7440-31-5	0.24630	62.49	624888	2.80	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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