



Material Declaration Sheet

Vishay Inter-technology

Date 1/27/2021

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
RCS0805 e3 series (10R to Less than 10M)	YES WITH EXEMPTION	01-Jan-2015	4.2949038	10R to Less than 10M	Yes	Israel	1

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)
Sn	Ag	e3	1	260 ° C	3	30	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	ceramic/glass			3.788000				
		Aluminum Oxide	1344-28-1	3.636500	96.0005	960005	84.67012	0 - None
		Calcium oxide	1305-78-8	0.015100	0.3986	3986	0.35158	0 - None
		Magnesium oxide	1309-48-4	0.060600	1.5998	15998	1.41097	0 - None
		Silicon Dioxide	7631-86-9	0.075800	2.0011	20011	1.76488	0 - None
EP-QD-10	Other duromer			0.064400				
		Copper Chromite Black Spinel	12053-18-8	0.019600	30.4348	304348	0.45635	0 - None
		Epoxy resin	25068-38-6	0.039900	61.9565	619565	0.92901	0 - None
		Silicon dioxide	7631-86-9	0.004900	7.6087	76087	0.11409	0 - None
Glass electrical contact	ceramic/glass			0.003100				
		Lead-Silicate	10099-76-0	0.003097	99.9000	999000	0.07211	7(c)-I
		Miscellaneous	System	0.000003	0.1000	1000	0.00007	0 - None
Glass enamel	ceramic/glass			0.025800				
		Chromium oxide (III)	1308-38-9	0.000500	1.9380	19380	0.01164	0 - None
		Lead-Silicate	10099-76-0	0.025300	98.0620	980620	0.58907	7(c)-I
Glass layer	ceramic/glass			0.021400				
		Lead-Silicate	10099-76-0	0.006400	29.9065	299065	0.14901	7(c)-I
		Palladium	7440-05-3	0.002100	9.8131	98131	0.04890	0 - None
		Ruthenium oxide	12036-10-1	0.004300	20.0935	200935	0.10012	0 - None
		Silver	7440-22-4	0.008600	40.1869	401869	0.20024	0 - None
Nickel plating	Nickel alloys			0.084000				
		Miscellaneous	System	0.000084	0.1000	1000	0.00196	0 - None
		Nickel	7440-02-0	0.083916	99.9000	999000	1.95386	0 - None
Silver electric contact	Other special metal			0.152203				
		Chromium	7440-47-3	0.000001	0.0009	9	0.00003	0 - None
		Copper	7440-50-8	0.000002	0.0014	14	0.00005	0 - None
		Copper oxide	1317-38-0	0.003900	2.5624	25624	0.09081	0 - None
		Silver	7440-22-4	0.148300	97.4354	974354	3.45293	0 - None
Sn99.9	Other special metal			0.156000				
		Miscellaneous	System	0.000156	0.1000	1000	0.00363	0 - None
		Tin	7440-31-5	0.155844	99.9000	999000	3.62858	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 7(c)-I - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

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.

Build Vishay
into your Design

ONE OF THE WORLD'S LARGEST MANUFACTURERS OF DISCRETE SEMICONDUCTORS AND PASSIVE COMPONENTS

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components