



Material Declaration Sheet

Vishay Inter-technology

Date: 4/4/2022

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
CRCW0603-C series	YES WITH EXEMPTION	01-Jul-2005	2.075853	All R values	Resistor	Vishay BCcomponents Reuschlar	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)
Matte Sn	Other	e3	1	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	1.73580	96.00	960003	83.62	0 - None
		Magnesium oxide	1309-48-4	0.01808	1.00	9999	0.87	0 - None
		Silicon dioxide	7631-86-9	0.05424	3.00	29998	2.61	0 - None
				0.02302				
EP-QD 20	Other durometer	Epoxy resin	25068-38-6	0.01912	83.04	830400	0.92	0 - None
		Silicon dioxide	7631-86-9	0.00390	16.96	169600	0.19	0 - None
Glass electrical contact	Ceramics / glass			0.00298				
		Cobalt oxide	1307-96-6	0.00047	15.77	157718	0.02	0 - None
		Copper oxide	1317-38-0	0.00047	15.77	157718	0.02	0 - None
		Glass w/o declarable substances	65997-17-3	0.00126	42.28	422819	0.06	0 - None
		Nickel oxide	1313-99-1	0.00047	15.77	157718	0.02	0 - None
Glass enamel	Ceramics / glass	Titanium oxide	13463-67-7	0.00031	10.40	104027	0.01	0 - None
				0.01617				
Glass layer	Ceramics / glass	Glass w/o declarable substances	65997-17-3	0.01615	99.90	999000	0.78	0 - None
		Miscellaneous	System	0.00002	0.10	1000	0.00	0 - None
Nickel chromium alloy	Nickel alloys			0.01110				
		Lead silicate (Glass)	10099-76-0	0.00777	70.00	700000	0.37	7(c)-1
		Ruthenium oxide	12036-10-1	0.00333	30.00	300000	0.16	0 - None
Nickel plating	Nickel alloys			0.00300				
		Chromium	7440-47-3	0.00000	20.00	200000	0.00	0 - None
		Nickel	7440-02-0	0.00000	80.00	800000	0.00	0 - None
Silver electrical contact	Other special metals			0.07212				
		Miscellaneous	System	0.00007	0.10	1000	0.00	0 - None
		Nickel	7440-02-0	0.07205	99.90	999000	3.47	0 - None
Tin plating	Other special metals			0.04389				
		Silver	7440-22-4	0.04385	99.90	999000	2.11	0 - None
		Miscellaneous	System	0.00004	0.10	1000	0.00	0 - None
Tin plating	Other special metals			0.09845				
		Lead	7439-92-1	0.00010	0.10	975	0.00	0 - None
		Tin	7440-31-5	0.09835	99.90	999025	4.74	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)-1 - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric 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.