



# Material Declaration Sheet

Vishay Inter-technology

Date: 4/25/2022

### Part / Product Family Details

Part / Family Series	RoHS Compliance Status	RoHS-Compliant Replacement Part	Total product Weight (mg)	Value Range	MDS Provided For	Manufacturing Location	
CRCW0603 RoHS Non Compliant (All R values except 1R to less than 0R761)	NO		2.1219021	All R values except 1R to less than 0R761	Resistor	Vishay BCComponents Buechling	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)
Tin/Lead	Other		Not Applicable	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			
Ceramic substrate		Magnesium Oxide	1309-48-4	0.01777	0.99	9899	0.84	0 - None	
		Aluminium Oxide	1344-28-1	1.71686	95.64	956399	80.91	0 - None	
		Silicon Dioxide	7631-86-9	0.05224	2.91	29101	2.46	0 - None	
		System		0.00826	0.46	4601	0.39	0 - None	
				0.01294					
Passivation		Lead(2+) Silicate	10099-76-0	0.01267	97.91	979134	0.60	0 - None	
		Chromium (iii) Oxide	1308-38-9	0.00027	2.09	20866	0.01	0 - None	
Resistive layer				0.01061					
		Lead(2+) Silicate	10099-76-0	0.00318	29.97	299717	0.15	0 - None	
		Ruthenium (iv) Oxide	12036-10-1	0.00212	19.98	199811	0.10	0 - None	
		Palladium	7440-05-3	0.00106	9.99	99906	0.05	0 - None	
		Silver	7440-22-4	0.00425	40.06	400566	0.20	0 - None	
Termination				0.26269					
		Lead(2+) Silicate	10099-76-0	0.00358	1.36	13628	0.17	0 - None	
		Lead	7439-92-1	0.02312	8.80	88012	1.09	0 - None	
		Nickel	7440-02-0	0.06225	23.70	236970	2.93	0 - None	
		Silver	7440-22-4	0.08124	30.93	309259	3.83	0 - None	
		Tin	7440-31-5	0.09250	35.21	352123	4.36	0 - None	
		Chromium	7440-47-3	0.00000	0.00	3	0.00	0 - None	
		Copper	7440-50-8	0.00000	0.00	5	0.00	0 - None	
				0.04053					
		Epoxy Resins	25068-38-6	0.00501	12.36	123604	0.24	0 - None	
		Silicon Dioxide	7631-86-9	0.03552	87.64	876396	1.67	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

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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