



Material Declaration Sheet

Vishay Inter-technology

Date 2/25/2021

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
MCT0603 series (3.32R to 221K)	YES WITH EXEMPTION	17-Jun-2005	1.85175	3.32R to 221K	Yes	Germany	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	CU Alloy	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	Ceramics / glass	Aluminium oxide	1344-28-1	1.650000	97.20	972000	86.6100	0 - None
		Miscellaneous	System	0.001650	0.10	1000	0.0891	0 - None
		Silicon dioxide	7631-86-9	0.044550	2.70	27000	2.4058	0 - None
Cu-ETP1	3.1 Copper			0.010900				
		Copper	7440-50-8	0.010889	99.90	999000	0.5880	0 - None
EP QD-60	other duromer	Miscellaneous	System	0.000011	0.10	1000	0.0006	0 - None
				0.025030				
Glass electrical contact	ceramic/glass	Epoxy resin	25068-38-6	0.008000	31.96	319616	0.4320	0 - None
		Filler	14807-96-6	0.013900	55.53	555334	0.7506	0 - None
		Organic pigment	147-14-8	0.000030	0.12	1199	0.0016	0 - None
		Silicone resin	92797-60-9	0.003100	12.39	123851	0.1674	0 - None
Nickel Chromium alloy	Nickel alloys			0.002520				
		Lead silicate [Glass]	10099-76-0	0.002300	91.27	912698	0.1242	7(c)-I
Nickel palting	Nickel alloys	Palladium	7440-05-3	0.000220	8.73	87302	0.0119	0 - None
				0.001000				
Silver electrical contact	other special metal	Chromium	7440-47-3	0.000400	40.00	400000	0.0216	0 - None
		Nickel	7440-02-0	0.000600	60.00	600000	0.0324	0 - None
Sn99.9	Other special metal			0.058900				
		Miscellaneous	System	0.000059	0.10	1000	0.0032	0 - None
		Nickel	7440-02-0	0.058841	99.90	999000	3.1776	0 - None
				0.029200				
		Chromium	7440-47-3	0.000400	1.37	13699	0.0216	0 - None
		Silver	7440-22-4	0.028800	98.63	986301	1.5553	0 - None
				0.074200				
		Miscellaneous	System	0.000074	0.10	1000	0.0040	0 - None
		Tin	7440-31-5	0.074126	99.90	999000	4.0030	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.