



Material Declaration Sheet

Draloric/Beyschlag Resistor

Date: 7/8/216

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 (3.32 R ≤ R ≤ 20K)	YES WITH EXEMPTION	Since 1995	1.85175	3.32 R ≤ R ≤ 20K	Yes	Germany	One

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	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		
Insulation (Lacquer)				0.02503				
	Epoxy Resine	Epoxy Resine	25068-38-6	0.00800	31.96	319616	0.43	0 - None
	Inorganic fillers and pigments (Glass Filler)	Inorganic fillers and pigments (Glass Filler)	System	0.01390	55.53	555334	0.75	0 - None
	Organic pigments, not to declare	Organic pigments, not to declare	System	0.00003	0.12	1199	0.00	0 - None
	Silicon resin	Silicon resin	System	0.00310	12.39	123851	0.17	0 - None
Resistive layer (Metal film)				0.00100				
	Nickel	Nickel	7440-02-0	0.00040	40.00	400000	0.02	0 - None
	Chromium	Chromium	7440-47-3	0.00060	60.00	600000	0.03	0 - None
Substrate (Ceramic)				1.65000				
	Aluminium Oxide	Aluminium Oxide	1344-28-1	1.58900	96.30	963030	85.81	0 - None
	Silicon Dioxide	Silicon Dioxide	7631-86-9	0.04455	2.70	27000	2.41	0 - None
	Miscellaneous	Miscellaneous	System	0.00165	0.10	1000	0.09	0 - None
	Silicate	Silicate	System	0.01480	0.90	8970	0.80	0 - None
Termination				0.17572				
	Lead(2+) Silicate	Lead(2+) Silicate	10099-76-0	0.00230	1.31	13089	0.12	Exemption No: 7(c)-1
	Nickel	Nickel	7440-02-0	0.05890	33.52	335192	3.18	0 - None
	Palladium	Palladium	7440-05-3	0.00022	0.13	1252	0.01	0 - None
	Silver	Silver	7440-22-4	0.02880	16.39	163897	1.56	0 - None
	Tin	Tin	7440-31-5	0.07420	42.23	422263	4.01	0 - None
	Chromium	Chromium	7440-47-3	0.00040	0.23	2276	0.02	0 - None
	Copper	Copper	7440-50-8	0.01090	6.20	62031	0.59	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. 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.

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