



Material Declaration Sheet

Draloric/Beyschlag Resistor

Date: 7/8/2016

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
MCU0805 (1R - less than or equal to 36K)	YES WITH EXEMPTION	Since 1995	4.528	1R ≤ R ≤ 36K	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)
Sn	CU Alloy	e3	N/A	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)	Epoxy Resine	Epoxy Resine	25068-38-6	0.07070	0.02250	31.82	318246	0.50	0 - None
	Basic Duromer:Silicone resin [Compound of a polymeric network]	Basic Duromer:Silicone resin [Compound of a polymeric network]	System		0.00870	12.31	123055	0.19	0 - None
	Glass Filler	Glass Filler	System		0.03940	55.73	557284	0.87	0 - None
	Pigment portion, not to declare	Pigment portion, not to declare	System		0.00010	0.14	1414	0.00	0 - None
Resistive layer (Metal film)	Silicon	Silicon	7440-21-3	0.00300	0.00120	40.00	400000	0.03	0 - None
	Chromium	Chromium	7440-47-3	0.00180	0.00180	60.00	600000	0.04	0 - None
Substrate (Ceramic)				4.02600					
	Aluminium Oxide	Aluminium Oxide	1344-28-1		3.87700	96.30	962991	85.62	0 - None
	Silicon Dioxide	Silicon Dioxide	7631-86-9		0.10900	2.71	27074	2.41	0 - None
	Miscellaneous	Miscellaneous	System		0.00400	0.10	994	0.09	0 - None
Termination	Silicate	Silicate	System		0.03600	0.89	8942	0.80	0 - None
				0.42830					
	Lead(2+) Silicate	Lead(2+) Silicate	10099-76-0		0.00550	1.28	12841	0.12	Exemption No: -7(c)-I
	Nickel	Nickel	7440-02-0		0.14370	33.55	335512	3.17	0 - None
	Palladium	Palladium	7440-05-3		0.00020	0.05	467	0.00	0 - None
	Silver	Silver	7440-22-4		0.07040	16.44	164371	1.55	0 - None
	Tin	Tin	7440-31-5		0.18090	42.24	422367	4.00	0 - None
	Chromium	Chromium	7440-47-3		0.00090	0.21	2101	0.02	0 - None
	Copper	Copper	7440-50-8		0.02670	6.23	62339	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)-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.