MATERIAL DECLARATION SHEET

BOURNS®

Material Number	4614X		
Product Line	Thick Film Conformal SIP		
Compliance Date	4-12-2010		
RoHS Compliant	Yes	MSL	1

No.	Construction Element(subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material\ Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Ceramic substrate	Alumina	0.22778	Aluminum oxide	1344-28-1	96.60	30.051	31.109
				Silicon dioxide	14808-60-7	2.10	0.653	
				Magnesium oxide	1309-48-4	1.10	0.342	
				Calcium oxide	1305-78-8	0.20	0.062	
2	Protective coating	Protective coating	0.00182	Bismuth trioxide	1304-76-3	60.00	0.149	0.249
				Silicon dioxide	14808-60-7	35.00	0.087	
				Chromium III oxide	7440-47-3	5.00	0.012	
3	Resistor	Resistive glass	0.00476	Ruthenium dioxide	12036-10-1	15.84	0.103	0.650
				Lead oxide	1317-36-8	42.08	0.274	
				Silicon dioxide	14808-60-7	16.83	0.109	
				Boron oxide	1303-86-2	5.89	0.038	
				Aluminum oxide	1344-28-1	16.83	0.109	
				Zinc oxide	1314-13-2	2.53	0.016	
4	Termination	Silver Palladium glass	0.00826	Silver	7440-22-4	93.63	1.056	1.129
				Palladium	7440-05-3	1.02	0.012	
				Glass	65997-17-3	5.44	0.061	
5	Leadframe with matte tin plating	Steel alloy with tin plating	0.1288	Iron	7439-89-6	85.86	15.103	17.591
				Tin	7440-31-5	14.14	2.487	
6	Solder	Solder	0.04662	Tin	7440-31-5	98.5	6.272	6.367
				Silver	7440-22-4	1.0	0.064	
				Copper	7440-50-8	0.5	0.032	

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7	Encapsulation	Molding compound	0.31416	Epoxy resin	25068-38-6	30	12.872	42.906
				Silicon dioxide	14808-60-7	45	19.308	
				Non-halogen flame retardant	proprietary	17	7.294	
				Pigment	13463-67-7 4531-49-1	8	3.433	
		Total weight	0.7322					

This Document was updated on: **July 7, 2011**

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. RoHS exemptions: 7(c)-I Electrical and electronic components containing lead in a glass or ceramic...

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