

MATERIAL DECLARATION SHEET



Material Number	CAT10-J4 Series			
Product Line	Thick Film Chip Resistors Arrays			
Compliance Date	4-1-2003 DC0314			
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	Ceramic	0.002381686493	Aluminum oxide	1344-28-1	96%	0.00228641903328	83.91%
				Crystalline Silica Quartz	14808-60-7	4%	0.00009526745972	3.50%
2	Conductor Layer	Conductor Ink	0.000076837386	Silver	7440-22-4	96%	0.00007376389056	2.71%
				Bismuth	7440-69-9	1%	0.00000076837386	0.03%
				Barium	7440-39-3	1%	0.00000076837386	0.03%
				Silicon	7440-21-3	1%	0.00000076837386	0.03%
				Boron	7440-42-8	1%	0.00000076837386	0.03%
3	Resistive Element	Resistive Ink	0.000064031155	Ruthenium oxide	12036-10-1	25%	0.00001600778875	0.59%
				Silver	7440-22-4	40%	0.00002561246200	0.94%
				Palladium	7440-05-3	15%	0.00000960467325	0.35%
				Lead	7439-92-1	20%	0.00001280623100	0.47%
4	Over Coating	Epoxy	0.000030516976	Epoxy	29690-82-2	100%	0.000030516976	1.12%
5	Marking	Epoxy	0.000003269676	Epoxy	25068-38-6	100%	0.000003269676	0.12%
6	End Terminal	NI-CR	0.000002452257	Nickel	7440-02-0	80%	0.000001961806	0.07%
				Chromium	7440-47-3	20%	0.000000490451	0.02%
7	Ni Plating	Nickel	0.000087736306	Nickel	7440-02-0	100%	0.000087736306	3.22%
8	Sn Plating	Tin	0.000078199751	Tin	7440-31-5	100%	0.000078199751	2.87%
Total weight			0.00272473					

This Document was updated on: **4-11-2016**

Important remarks: Resistive Element contains the Lead (Pb) which can be referred to RoHS Exemption 7(c)-I