


# MATERIAL DECLARATION SHEET



Material Number	CRL2512			
Product Line	Chip resistor			
Compliance Date	2010/10/26			
RoHS Compliant	YES	MSL	1	

No.	Construction Element(subpart)	Homogeneous Material	Material weight [mg]	Homogeneous Material Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Ceramic Substrate	alumina	33.806	Aluminum oxide	1344-28-1	96%	86.13%	89.72%
				Silicon dioxide	14808-60-7	4%	3.59%	
2	Conductor Layer	glass	0.512	Silver	7440-22-4	96%	1.29%	1.36%
				Bismuth trioxide	1304-76-3	1%	0.0175%	
				Barium oxide	1304-28-5	1%	0.0175%	
				Silicon dioxide	7631-86-9	1%	0.0175%	
				Boron oxide	1303-86-2	1%	0.0175%	
3	Resistive Element	glass	0.486	Ruthenium dioxide	12036-10-1	25%	0.32%	1.29%
				Silver	7440-22-4	40%	0.52%	
				Palladium	7440-05-3	15%	0.19%	
				Lead oxide (Glass)	1317-36-8	20%	0.26%	
4	Over-Coating	Epoxy	0.656	Epoxy	29690-82-2	100%	1.74%	1.74%
5	Marking	Epoxy	0.041	Epoxy	25068-38-6	100%	0.11%	0.11%
6	End Terminal	NI-CR	0.011	Nickel	7440-02-0	80%	0.02%	0.03%
				Chromium III	7440-47-3	20%	0.01%	
7	Nickel underplate	Nickel	1.145	Nickel	7440-02-0	100%	3.04%	3.04%
8	Matte tin plating	Tin	1.021	Tin	7440-31-5	100%	2.71%	2.71%
		Total weight	37.678					

This Document was updated on: 10.26.2010

### Important remarks:

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