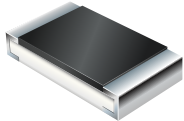


MATERIAL DECLARATION SHEET



Material Number	CR0402A Series			
Product Line	Thick Film Chip Resistors			
Compliance Date	2018/06/14			
RoHS Compliant	Yes	MSL	1/2/3	

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	CRXXXX	0.42805	Aluminum oxide	1344-28-1	96%	80.02%	83.35%
				Silicon dioxide	14808-60-7	4%	3.33%	
2	Conductor Layer	AZZ.002.5421	0.01079	Silver	7440-22-4	95%	2.00%	2.10%
				Glass	65997-17-3	5%	0.11%	
3	Resistive Element	AZZ.002.00XXX	0.00842	Ruthenium oxide	12036-10-1	25%	0.41%	1.64%
				Silver	7440-22-4	40%	0.66%	
				Palladium	7440-05-3	15%	0.25%	
				Lead Glass	7439-92-1	20%	0.33%	
4	Over Coating	AZZ.002.1057A	0.01043	Epoxy	25068-38-6	100%	2.03%	2.03%
5	End Terminal	AZZ.003.0048	0.00185	Nickel	7440-02-0	80%	0.29%	0.36%
				Chromium	7440-47-3	20%	0.07%	
6	Ni Plating	Ni	0.02855	Nickel	7440-02-0	100%	5.56%	5.56%
7	Sn Plating	Sn	0.02547	Tin	7440-31-5	100%	4.96%	4.96%
			TOTAL WEIGHT	0.513556				

This Document was updated on: 2018/06/14

Important remarks: It is the responsibility of the user to verify they are accessing the latest version.