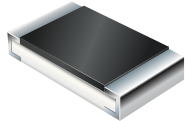


MATERIAL DECLARATION SHEET



Material Number	CR0603A Series			
Product Line	Thick Film Chip Resistors			
Compliance Date	2018/06/14			
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	CRXXXX	1.66179	Aluminum oxide	1344-28-1	96%	82.49%	85.93%
				Silicon dioxide	14808-60-7	4%	3.44%	
2	Conductor Layer	AZZ.002.5421	0.04467	Silver	7440-22-4	95%	2.19%	2.31%
				Glass	65997-17-3	5%	0.12%	
3	Resistive Element	AZZ.002.00XXX	0.02553	Ruthenium oxide	12036-10-1	25%	0.33%	1.32%
				Silver	7440-22-4	40%	0.53%	
				Palladium	7440-05-3	15%	0.20%	
				Lead Glass	7439-92-1	20%	0.26%	
4	Over Coating	AZZ.002.1057A	0.03036	Epoxy	25068-38-6	100%	1.57%	1.57%
5	Marking	ZSR-XXX	0.00309	Epoxy	25085-99-8	100%	0.16%	0.16%
6	End Terminal	AZZ.003.0048	0.00251	Nickel	7440-02-0	80%	0.10%	0.13%
				Chromium	7440-47-3	20%	0.03%	
7	Ni Plating	Ni	0.08780	Nickel	7440-02-0	100%	4.54%	4.54%
8	Sn Plating	Sn	0.07813	Tin	7440-31-5	100%	4.04%	4.04%
			TOTAL WEIGHT	1.93388				

This Document was updated on: 2018/6/14

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