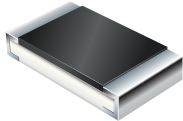


MATERIAL DECLARATION SHEET



Material Number	CR2512A 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	Material Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Ceramic Substrate	CRXXXX	33.80560	Aluminum oxide	1344-28-1	96%	86.13%	89.72%
				Silicon dioxide	14808-60-7	4%	3.59%	
2	Conductor Layer	AZZ.002.5421	0.51243	Silver	7440-22-4	95%	1.29%	1.36%
				Glass	65997-17-3	5%	0.07%	
3	Resistive Element	AZZ.002.00XX X	0.48606	Ruthenium oxide	12036-10-1	25%	0.32%	1.29%
				Silver	7440-22-4	40%	0.52%	
				Palladium	7440-05-3	15%	0.19%	
				Lead Glass	7439-92-1	20%	0.26%	
4	Over Coating	AZZ.002.1057 A	0.65562	Epoxy	25068-38-6	100%	1.74%	1.74%
5	Marking	ZSR-XXX	0.04145	Epoxy	25085-99-8	100%	0.11%	0.11%
6	End Terminal	AZZ.003.0048	0.01130	Nickel	7440-02-0	80%	0.02%	0.03%
				Chromium	7440-47-3	20%	0.01%	
7	Ni Plating	Ni	1.14544	Nickel	7440-02-0	100%	3.04%	3.04%
8	Sn Plating	Sn	1.02110	Tin	7440-31-5	100%	2.71%	2.71%
			TOTAL WEIGHT					
			37.679					

This Document was updated on: 06-14-2018 Important remarks: It is the responsibility of the user to verify they are accessing the latest version.