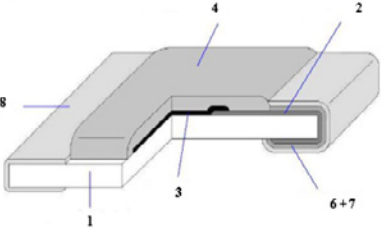


# MATERIAL DECLARATION SHEET



Material Number	CR0402 Series			Picture attached 
Product Line	Thick Film Chip Resistors			
Compliance Date	2022/07/26			
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	Ceramic	0.4280	Aluminum oxide	1344-28-1	96%	80.02%	83.35
				Silicon dioxide	14808-60-7	4%	3.33%	
2	Conductor Layer	Thick Film	0.0108	Silver	7440-22-4	95%	2%	2.10
				Glass	65997-17-3	5%	0.11%	
3	Resistive Element	Thick Film Resistor	0.0084	Ruthenium(IV) oxide	12036-10-1	25%	0.41%	1.64
				Silver	7440-22-4	40%	0.66%	
				Palladium	7440-05-3	15%	0.33%	
				Lead-containing glass	7439-92-1	20%	0.25%	
4	Over Coating	Epoxy	0.0104	Epoxy	25068-38-6	100%	2.03%	2.03
6	End Terminal	NI-CR	0.0018	Nickel	7440-02-0	80%	0.29%	0.36
				Chromium	7440-47-3	20%	0.07%	
7	Ni Plating	Nickel	0.0286	Nickel	7440-02-0	100%	5.56%	5.56%
8	Sn Plating	Tin	0.0255	Tin	7440-31-5	100%	4.96%	4.96%
			TOTAL WEIGHT	0.5135				

This Document was updated on: 2022/07/26← the Date you completed fulfillment.  
 Important remarks: It is the responsibility of the user to verify they are accessing the latest version.