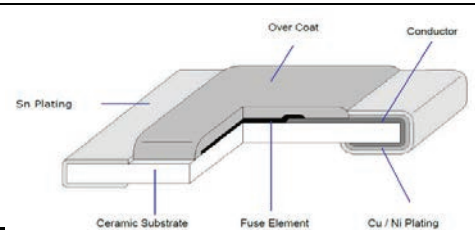


MATERIAL DECLARATION SHEET



Material Number	SF-0402FP		
Product Line	Lead Free Thin Film Chip Fuse		
Compliance Date	2017/07/05		
RoHS Compliant	Yes	MSL	1



No.	Construction Element (subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material\ Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Ceramic Substrate	Ceramic	0.000311956	Aluminum oxide	1344-28-1	96%	76.36%	79.54%
				Quartz	14808-60-7	3%	2.39%	
				Magnesium oxide	1309-48-4	1%	0.80%	
2	Inner Conductor	Titanium	0.00000263	Titanium	7440-32-6	13.5%	0.09%	0.67%
		Tungsten		Tungsten	7440-33-7	1.5%	0.01%	
		Copper		Copper	7440-50-8	85%	0.57%	
3	Isolation	Quartz	0.0000035	Quartz	14808-60-7	100%	0.89%	0.89%
4	Fuse Element	Copper	0.0000026	Copper	7440-50-8	90%	0.60%	0.67%
		Tin		Tin	7440-31-5	10%	0.07%	
5	Over-Coating	Epoxy	0.0000165	Epoxy	29690-82-2	100%	4.20%	4.20%
6	End Terminal	Nickel Chromium	0.0000003	Nickel	7440-02-0	80%	0.06%	0.07%
				Chromium	7440-47-3	20%	0.01%	
7	Marking	Epoxy	0.0000006	Epoxy	25085-99-8	100%	0.15%	0.15%
8	Cu Plating	Copper	0.0000221	Copper	7440-50-8	100%	5.26%	5.63%
9	Ni Plating	Nickel	0.0000169	Nickel	7440-02-0	100%	3.47%	4.31%
10	Sn plating	Tin	0.0000152	Tin	7440-31-5	100%	3.10%	3.87%
TOTAL WEIGHT			0.0003922					

This Document was updated on: 4-25-2018