

MATERIAL DECLARATION SHEET

Package Type	SMA (DO-214AC)			
Product Line	TISP® Thyristor Surge Protectors			
Compliance Date	November 31, 2004			
RoHS Compliant	Yes (-S suffix)	MSL	1	

Bourns TISP® products complying with RoHS legislation are identified with a “-S” suffix in the component part number e.g. TISP4C250H3BJR-S.

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	Encapsulation	Epoxy resin	0.042577	Amorph. Silica (SiO ₂)	7631-86-9	43.00	18.308	56.211
				Quartz (SiO ₂)	14808-60-7	33.00	14.050	
				Epoxy Resin	Proprietary	15.00	6.387	
				Phenol Formaldehyde	9003-35-4	8.00	3.406	
				Boron Zinc Hydroxide	68541-56-0	0.70	0.298	
				Carbon Black	1333-86-4	0.30	0.128	
2	Leadframe	Copper alloy	0.030754	Copper	7440-50-8	97.57	30.007	40.601
				Iron	7439-89-6	2.30	0.707	
				Zinc	7440-66-6	0.10	0.031	
				Phosphorous	7723-14-0	0.03	0.009	
3	Chip	Silicon	0.001390	Silicon	7440-21-3	90.41	1.257	1.835
				Aluminium	7429-90-5	3.18	0.044	
				Nickel	7440-02-0	6.12	0.085	
				Gold	7440-57-5	0.28	0.004	
4	Die Attach	Solder	0.000222	Lead	7439-92-1	92.50	0.205	0.293
				Tin	7440-31-5	5.00	0.011	
				Silver	7440-22-4	2.50	0.006	
5	Terminal Finish	Matte Sn	0.000803	Tin	7440-31-5	100.00	0.803	1.060
		Total weight	0.075746					