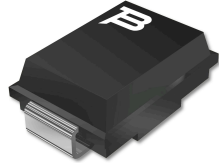



MATERIAL DECLARATION SHEET

Package Type	SMB (DO-214AA)			
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	0.058014	Amorph. Silica (SiO ₂)	7631-86-9	43.00	23.250	54.071
				Quartz (SiO ₂)	14808-60-7	33.00	17.843	
				Epoxy Resin	Proprietary	15.00	8.111	
				Phenol Formaldehyde	9003-35-4	8.00	4.326	
				Boron Zinc Hydroxide	138265-88-0	0.70	0.378	
				Carbon Black	1333-86-4	0.30	0.162	
2	Leadframe	Copper alloy	0.043397	Copper	7440-50-8	97.57	39.465	40.448
				Iron	7439-89-6	2.30	0.930	
				Zinc	7440-66-6	0.10	0.040	
				Phosphorous	7723-14-0	0.03	0.012	
3	Chip	Silicon	0.003085	Silicon	7440-21-3	92.96	2.673	2.875
				Aluminium	7429-90-5	4.14	0.119	
				Nickel	7440-02-0	2.77	0.080	
				Gold	7440-57-5	0.13	0.004	
4	Die Attach	Solder	0.000654	Lead	7439-92-1	92.50	0.564	0.610
				Tin	7440-31-5	5.00	0.030	
				Silver	7440-22-4	2.50	0.016	
5	Terminal Finish	Matte Sn	0.002142	Tin	7440-31-5	100.00	1.997	1.997
			Total weight	0.107292				