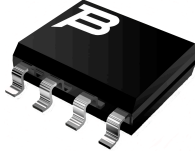



# MATERIAL DECLARATION SHEET



Package Type	8-SOIC (MS-012AA)			
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. TISP61089DR-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	0.042343	Fused Silica (SiO <sub>2</sub> )	60676-86-0	85.00	43.302	52.977
				Epoxy	na	6.00%	3.179	
				Phenol Resin	na	6.00%	3.179	
				Epoxy Cresol Novolac	29690-82-2	2.50%	1.324	
				Carbon Black	1333-86-4	0.50%	0.265	
2	Leadframe	Copper alloy	0.030438	Copper	7440-50-8	97.57	37.157	38.082
				Iron	7439-89-6	2.30	0.876	
				Zinc	7440-66-6	0.10	0.038	
				Phosphorous	7723-14-0	0.03	0.011	
3	Chip	Silicon	0.004194	Silicon	7440-21-3	92.58	4.858	5.248
				Aluminium	7429-90-5	2.25	0.118	
				Nickel	7440-02-0	4.96	0.260	
				Gold	7440-57-5	0.21	0.011	
4	Die Attach	Silver epoxy	0.001000	Silver	7440-22-4	70.00	0.876	1.251
				Epoxy	9003-36-5	30.00	0.375	
5	Bond wires	Copper	0.000220	Copper	7440-50-8	99.99	0.2754	0.2754
6	Terminal Finish	Matte Tin	0.001732	Matte Tin	7440-31-5	100.00	2.167	2.167
				Total weight	0.079928			

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.