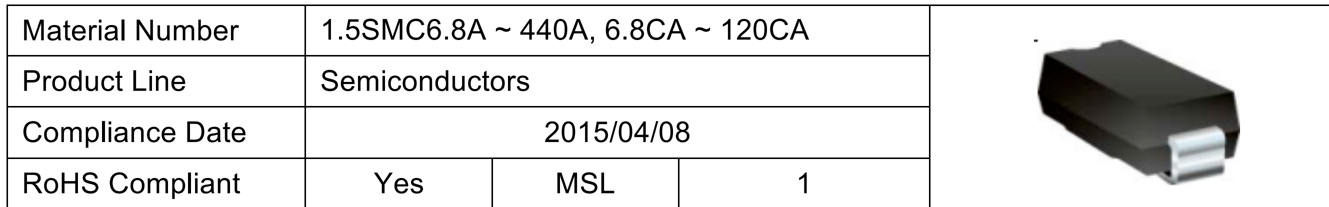
MATERIAL DECLARATION SHEET



Material Number	1.5SMC6.8A ~ 440A, 6.8CA ~ 120CA		
Product Line	Semiconductors		
Compliance Date	2015/04/08		
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	Dice	Silicon	4.829	Silicon	7440-21-3	60.1800%	1.221%	2.028%
				Phosphorous	7723-14-0	0.0100%	0.0002%	
				Boron	7440-42-8	0.0100%	0.0002%	
				Nickel	7440-02-0	14.8000%	0.300%	
				Lead glass	7439-92-1	12.5000%	0.254%	
				Silicon dioxide	7631-86-9	10.0000%	0.203%	
				Aluminum oxide	1344-28-1	2.5000%	0.0507%	
2	Die attach (Solder)	solder paste	9.170	Tin	7440-31-5	5.000%	0.193%	3.851%
				Lead	7439-92-1	92.500%	3.563%	
				Silver	7440-22-4	2.500%	0.096%	
3	Lead frame / Leads / Disc	Copper alloy	110.667	Copper	7440-50-8	99.800%	46.388%	46.481%
				Iron	7439-89-6	0.150%	0.070%	
				Phosphorus	7723-14-0	0.050%	0.023%	
4	Molding Compound	Epoxy material	112.150	Silica	14808-60-7	76.000%	35.799%	47.104%
				Epoxy resin	25928-94-3	9.000%	4.239%	
				Phenolic resin-A,-B	9003-35-4	8.000%	3.768%	
				Aluminum hydroxide	21645-51-2	6.000%	2.826%	
				Carbon black	1333-86-4	1.000%	0.471%	
5	Plating	Matte-Tin	1.275	Tin	7440-31-5	100.000%	0.536%	0.536%
		Total weight	238.091					

This Document was updated on: 2015/04/08

(EU) RoHS Directive 2011/65/EU ANNEX - Application of lead which are exempted from the requirements : 7(a) Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead), and; 7(c)-I Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

CASRN: CAS Registry Number® is a Registered Trademark of the American Chemical Society