


# MATERIAL DECLARATION SHEET



Material Number	SMBJ5.0A~376A, SMBJ5.0CA~170CA			
Product Line	Semiconductors			
Compliance Date	2011/01/01			
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	2.350	Silicon	7440-21-3	60.18	1.5286	2.540
				Phosphorus	7723-14-0	0.01	0.00025	
				Boron	7440-42-8	0.01	0.00025	
				Nickel	7440-02-0	14.80	0.3759	
				Lead-containing glass	7439-92-1	12.50	0.3175	
				Silicon dioxide	7631-86-9	10.00	0.254	
				Aluminum oxide	1344-28-1	2.50	0.0635	
2	High-melting point Solder paste	solder paste	2.150	Tin	7440-31-5	5.00	0.116	2.324
				Lead	7439-92-1	92.50	2.150	
				Silver	7440-22-4	2.50	0.058	
3	Lead frame / Leads / Disc	N/A	33.50	Copper	7440-50-8	99.80	36.140	36.212
				Iron	7439-89-6	0.15	0.054	
				Phosphorus	7723-14-0	0.05	0.018	
4	Molding Compound (Plastic Package Only)	Epoxy material	53.50	Silica	14808-60-7	76.00	43.952	57.831
				Epoxy resin	25928-94-3	9.00	5.205	
				Phenolic resin-A,-B	9003-35-4	8.00	4.626	
				Hydroxide metal	21645-51-2	6.00	3.470	
5	Plating	Matte-Tin	1.011	Tin	7440-31-5	100.00	1.093	1.093
		Total Weight	92.511					

This Document was updated on: **2015/02/09**

(EU) RoHS Directive 2011/65/EU 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)

7(c)-I Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound.