


MATERIAL DECLARATION SHEET



Material Number	P4SMA6.8A ~ 440A, P4SMA6.8CA ~ 150CA			
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	1.330	Silicon	7440-21-3	60.18	1.28	2.127
				Phosphorous	7723-14-0	0.01	0.0002	
				Boron	7440-42-8	0.01	0.0002	
				Nickel	7440-02-0	14.8	0.3148	
				Lead glass	7439-92-1	12.5	0.2659	
				Silicon dioxide	7631-86-9	10.0	0.2127	
				Aluminum oxide	1344-28-1	2.5	0.0532	
2	High-melting point Solder paste	Solder paste	2.003	Tin	7440-31-5	5	0.16	3.203
				Lead	7439-92-1	92.5	2.963	
				Silver	7440-22-4	2.5	0.08	
3	Lead frame	Copper alloy	27.5	Copper	7440-50-8	99.8	43.89	43.978
				Iron	7439-89-6	0.15	0.066	
				Phosphorus	7723-14-0	0.05	0.022	
4	Molding compound	Epoxy material	31.035	Silica	14808-60-7	76	37.72	49.632
				Epoxy resin	25928-94-3	9	4.467	
				Phenolic resin-A,B	9003-35-4	8	3.971	
				Aluminum hydroxide	21645-51-2	6	2.978	
				Carbon black	1333-86-4	1	0.496	
5	Plating	Matte-100% tin	0.663	Tin	7440-31-5	100	1.06	1.06
		Total weight		62.531				

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. piezoelectric devices, or in a glass or ceramic matrix compound.