


MATERIAL DECLARATION SHEET



Material Number	SMLJ12A~58A-Q , 12CA~58CA-Q			
Product Line	(SMLJ-Q SERIES)			
Compliance Date	2010/12/30			
RoHS Compliant	Yes	MSL	1	

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	Dice	Silicon with Driver in Metallization Passivation.	0.004829	Silicon (Si)	7440-21-3	60.1800	1.221	2.028
				Phosphorous(P)	7723-14-0	0.0100	0.0002	
				Boron(B)	7440-42-8	0.0100	0.0002	
				Nickel (Ni)	7440-02-0	14.8000	0.300	
				Lead Silicate glass (Note2)	65997-18-4	12.5000	0.253	
				SiO ₂	7631-86-9	10.0000	0.203	
2	Die attach (Solder)	solder paste	0.009170	Tin (Sn)	7440-31-5	5.000	0.1926	3.851
				Lead (Pb) (Note3)	7439-92-1	92.500	3.5626	
				(Ag)	7440-22-4	2.500	0.096	
3	Lead frame / Leads / Disc	Copper	0.110667	Copper (Cu)	7440-50-8	99.800	46.388	46.481
				Iron (Fe)	7439-89-6	0.150	0.070	
				P (Note4)	7723-14-0	0.050	0.023	
4	Molding Compound (Plastic Package Only)	Epoxy material	0.112150	Silica (SiO ₂)	60676-86-0	76.000	35.799	47.104
				Epoxy resin	29690-82-2	12.000	5.653	
				Phenolic resin	9003-35-4	11.000	5.181	
				Carbon Black	1333-86-4	1.000	0.471	
5	Plating	Matte-Tin	0.001275	Tin (Sn)	7440-31-5	100.000	0.536	0.536
		Total weight	0.238091g					

This Document was updated on: 2022/08/19

MATERIAL DECLARATION SHEET



Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. 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. (EU) RoHS Directive 2011/65/EU ANNEX.
3. 7(a) Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead) . (EU) RoHS Directive 2011/65/EU ANNEX
4. Phosphorus which is included in copper and copper alloy products are state of metal and that are stable condition which is combined with other metal ,so there are no flow out, leak and segregation.