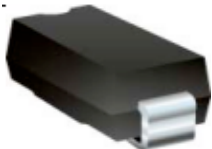


MATERIAL DECLARATION SHEET



Material Number	SMBJ-Q			
Product Line	Semiconductor Products			
Compliance Date	2017/7/31			
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	0.002350	Silicon	7440-21-3	60.1800%	1.529%	2.540%
				Phosphorus	7723-14-0	0.0100%	0.0003%	
				Boron	7440-42-8	0.0100%	0.0003%	
				Nickel	7440-02-0	14.8000%	0.376%	
				Lead	7439-92-1	12.5000%	0.318%	
				Silicon dioxide	7631-86-9	10.0000%	0.254%	
				Aluminum oxide	1344-28-1	2.5000%	0.0635%	
2	High-melting point Solder paste	solder paste	0.002150	Tin	7440-31-5	5.000%	0.116%	2.324%
				Lead	7439-92-1	92.500%	2.150%	
				Silver	7440-22-4	2.500%	0.058%	
3	Lead frame	Copper	0.03350	Copper	7440-50-8	99.800%	36.139%	36.212%
				Iron	7439-89-6	0.150%	0.054%	
				Phosphorus	7723-14-0	0.050%	0.018%	
				Silicon dioxide	14808-60-7	76.000%	43.952%	
4	Molding Compound	Epoxy material	0.05350	Epoxy resin	25928-94-3	9.000%	5.205%	57.831%
				Phenolic resin-A,-B	9003-35-4	8.000%	4.626%	
				Hydroxide metal	-	6.000%	3.470%	
				Carbon black	1333-86-4	1.000%	0.578%	
5	Plating	Matte-Tin	0.001011	Tin	7440-31-5	100.000%	1.093%	1.093%
		Total Weight	0.092511					

MATERIAL DECLARATION SHEET

BOURNS®

This Document was updated on: 2017/7/31

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. 7(a) Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)
3. 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.