


# MATERIAL DECLARATION SHEET



Material Number	15KPA-SD-Q series			
Product Line	Semiconductor Products			
Compliance Date	2019/05/06			
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	0.0356	Silicon	7440-21-3	59.42%	0.7347%	1.24%
				Phosphorous	7723-14-0	0.01%	0.0001%	
				Boron	7440-42-8	0.01%	0.0001%	
				Nickel	7440-02-0	14.80%	0.1830%	
				Gold	7440-57-5	0.76%	0.0094%	
				Lead <sup>2</sup>	7439-92-1	12.50%	0.1546%	
				Silicon dioxide	7631-86-9	10.00%	0.1237%	
				Aluminum oxide	1344-28-1	2.50%	0.0309%	
2	Die Attach	Metal	0.05365	Tin	7440-31-5	5.00%	0.0932%	1.86%
				Lead <sup>(Note 3)</sup>	7439-92-1	92.50%	1.7237%	
				Silver	7440-22-4	2.50%	0.0466%	
3	Lead frame	Copper	2.25725	Copper	7440-50-8	99.80%	78.2463%	78.40%
				Iron	7439-89-6	0.15%	0.1176%	
				Phosphorus	7723-14-0	0.05%	0.0392%	
4	Molding compound	Epoxy material	0.50775	Silica	14808-60-7	76.00%	13.4035%	17.64%
				Epoxy resin	25928-94-3	12.00%	2.1163%	
				Phenolic resin	9003-35-4	11.00%	1.9400%	
				Carbon	1333-86-4	1.00%	0.1764%	
5	Plating	Matte-100% tin	0.024783	Tin	7440-315	100.00%	0.8608%	0.86%
		Total weight	2.879033					

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This Document was updated on: 2019/05/06

## Important remarks:

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