Material Composition Specification

SMA Case

Device average mass . . . . 67.9 mg
Fluctuation margin . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	1.12%	0.76	Si	7440-21-3	1.12%	0.76	11,193
leadframe	copper	40.64%	27.59	Cu	7440-50-8	40.64%	27.59	406,351
die attach	high temperature solder paste	3.31%	2.25	Pb	7439-92-1	3.06%	2.081	30,649
				Sn	7440-31-5	0.17%	0.113	1,664
				Ag	7440-22-4	0.08%	0.056	825
encapsulation*	EMC	54.04%	36.69	silica	7631-86-9	36.75%	24.95	367,468
				epoxy resin	29690-82-2	10.81%	7.338	108,075
				phenol resin	9003-35-4	5.4%	3.669	54,038
				Sb_2O_3	1309-64-4	0.54%	0.367	5,405
				Br	7726-95-6	0.54%	0.367	5,405
	EMC GREEN	54.04%	36.69	silica (fused)	60676-86-0	41.61%	28.253	416,116
				epoxy resin	29690-82-2	5.4%	3.669	54,038
				phenol resin	9003-35-4	5.24%	3.559	52,418
				carbon black	1333-86-4	0.16%	0.11	1,620
				metal hydroxide	1309-42-8	1.62%	1.1	16,201
plating**	tin/lead process	0.89%	0.61	Sn	7440-31-5	0.71%	0.485	7,143
				Pb	7439-92-1	0.18%	0.121	1,782
	matte tin	0.89%	0.61	Sn	7440-31-5	0.89%	0.606	8,925

*EMC GREEN molding compound is Halogen-Free.
**For Lead Free plating, add suffix "PB FREE" to part number.
For Tin/Lead plating, add suffix "TIN/LEAD" to part number.
No suffix designation allows for the supply of either lead-free or tin/lead plated product depending on availability.

Disclaimer
The information provided in this Material Composition data sheet is, to the best of our knowledge, correct. However, there is no guarantee to completeness or accuracy, as some information is derived from data sources outside the company.