Material Composition Specification

SOD-123F Case

Device average mass . . . . . **17.0 mg**

Fluctuation margin . . . . . **+/-10%**

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	4.59%	0.78	Si	7440-21-3	4.59%	0.78	45,882
leadframe	Cu alloy	49.47%	8.41	Cu	7440-50-8	47.06%	8.0	470,588
				Fe	7439-89-6	2.41%	0.41	24,118
die attach	high temperature solder paste	7.65%	1.30	Pb	7439-92-1	7.08%	1.203	70,765
				Sn	7440-31-5	0.38%	0.065	3,824
				Ag	7440-22-4	0.19%	0.032	1,882
encapsulation*	EMC	37.94%	6.45	silica	7631-86-9	26.24%	4.461	262,412
				epoxy resin	Proprietary	11.24%	1.911	112,412
				Sb_2O_3	1309-64-4	0.04%	0.007	412
				Br	7726-95-6	0.42%	0.071	4,176
	EMC GREEN	37.94%	6.45	silica (fused)	60676-86-0	29.22%	4.967	292,176
				epoxy resin	29690-82-2	3.79%	0.645	37,941
				phenol resin	9003-35-4	3.68%	0.626	36,824
				carbon black	1333-86-4	0.11%	0.019	1,118
				metal hydroxide	1309-42-8	1.14%	0.193	11,353
plating**	tin/lead process	0.35%	0.06	Sn	7440-31-5	0.29%	0.05	2,941
				Pb	7439-92-1	0.06%	0.01	588
	matte tin	0.35%	0.06	Sn	7440-31-5	0.35%	0.06	3,529

*EMC GREEN molding compound is Halogen-Free.

**For Lead Free plating, add suffix “LEAD 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.