

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 ₂ O 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 "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.

R4 (16-July 2018)