

Material Composition Specification

SOD-123F Case

Pb (lead)-free plating**



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	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	amorphous silica	7631-86-9	26.24%	4.46	262,353
				epoxy resin	Proprietary	11.24%	1.91	112,353
				carbon	1333-86-4	0.47%	0.08	4,706
	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	1333-86-4	0.11%	0.019	1,118
magnesium 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
	100% tin process	0.35%	0.06	Sn	7440-31-5	0.35%	0.06	3,529

*EMC GREEN molding compound is Halogen-Free.

**Specify Lead-Free when ordering 100% tin (Pb-free) plating.

Disclaimer

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