

Material Composition Specification

SOD-123 Case

Pb (lead)-free plating**



Device average mass **10.2 mg**

Fluctuation margin **+/-10%**

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	0.58%	0.06	Si	7440-21-3	0.58%	0.06	5,882
bond wire	gold	0.1%	0.01	Au	7440-57-5	0.1%	0.01	980
leadframe	alloy 42 w/ silver plating	21.18%	2.16	Fe	7439-89-6	12.27%	1.252	122,745
				Ni	7440-02-0	8.48%	0.864	84,706
				Ag	7440-22-4	0.43%	0.044	4,314
encapsulation*	EMC	77.75%	7.93	silica	7631-86-9	53.76%	5.484	537,647
				epoxy resin	Proprietary	23.04%	2.35	230,392
				Sb ₂ O ₃	1309-64-4	0.09%	0.009	882
				Br	7726-95-6	0.85%	0.087	8,530
	EMC GREEN	77.75%	7.93	silica	7631-86-9	54.42%	5.551	544,216
				epoxy resin	Proprietary	23.33%	2.379	233,236
plating**	tin lead process	0.39%	0.04	Sn	7440-31-5	0.31%	0.032	3,138
				Pb	7439-92-1	0.08%	0.008	784
	100% tin process	0.39%	0.04	Sn	7440-31-5	0.39%	0.04	3,922

*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.