

Material Composition Specification

SOT-23 Case

Pb (lead)-free plating**



Device average mass 8.5 mg

Fluctuation margin +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	2.71%	0.23	Si	7440-21-3	2.69%	0.229	26941
bond wire	gold	0.24%	0.02	Au	7440-57-5	0.25%	0.021	2471
leadframe	alloy 42 w/ silver plating	26.12%	2.22	Fe	7439-89-6	14.99%	1.274	149882
				Ni	7440-02-0	10.41%	0.885	104118
				Ag	7440-22-4	0.71%	0.060	7059
encapsulation*	EMC	68.94%	5.86	silica	7631-86-9	51.00%	4.335	510000
				epoxy resin	Proprietary	16.05%	1.364	160471
				Sb ₂ O ₃	1309-64-4	1.39%	0.118	13882
				TBBA	79-94-7	0.34%	0.029	3412
				carbon	1333-86-4	0.18%	0.015	1765
	EMC GREEN	68.94%	5.86	silica	7631-86-9	52.31%	4.447	523120
				epoxy resin	Proprietary	16.46%	1.399	164599
				carbon	1333-86-4	0.18%	0.015	1810
plating**	tin lead process	2.00%	0.17	Sn	7440-31-5	1.59%	0.135	15882
				Pb	7439-92-1	0.41%	0.035	4118
	100% tin process	2.00%	0.17	Sn	7440-31-5	2.00%	0.17	20000

*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.