

Material Composition Specification

SOD-323 Case



Device average mass **4.9 mg**
 Fluctuation margin **+/-10%**

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	1.43%	0.07	Si	7440-21-3	1.43%	0.07	14,286
bond wire	gold	0.2%	0.01	Au	7440-57-5	0.2%	0.01	2,041
leadframe	copper w/ silver plating	22.82%	1.118	Cu	7440-50-8	22.24%	1.09	222,449
				Fe	7439-89-6	0.12	0.006	1,224
				Ag	7440-22-4	0.45%	0.022	4,490
encapsulation*	EMC	71.55%	3.506	silica	7631-86-9	51.59%	2.528	515,918
				epoxy resin	Proprietary	17.96%	0.88	179,592
				Sb ₂ O ₃	1309-64-4	1.43%	0.07	14,286
				TBBA	79-94-7	0.37%	0.018	3,673
				carbon black	1333-86-4	0.2%	0.01	2,041
	EMC GREEN	71.55%	3.506	silica	60676-86-0	47.63%	2.334	476,327
				epoxy resin	29690-82-2	11.04%	0.541	110,408
				phenol resin	9003-35-4	5.53%	0.271	55,306
				carbon black	1333-86-4	0.2%	0.01	2,041
				aluminum hydroxide	21645-51-2	7.14%	0.35	71,429
plating**	tin/lead process	4.0%	0.196	Sn	7440-31-5	3.41%	0.167	34,082
				Pb	7439-92-1	0.59%	0.029	5,918
	matte tin	4.0%	0.196	Sn	7440-31-5	4.0%	0.196	40,000

*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.

R9 (3-October 2019)