

Material Composition Specification

SOT-563 Case



Device average mass 2.92 mg
 Fluctuation margin +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	2.74%	0.08	Si	7440-21-3	2.74%	0.08	27,397
bond wire	gold or copper	0.68%	0.02	Au	7440-57-5	0.68%	0.02	6,849
				Cu	7440-50-8			
leadframe	Cu alloy w/ silver plating	40.41%	1.18	Cu	7440-50-8	34.93%	1.02	349,315
				Ni	7440-02-0	3.42%	0.10	34,247
				Sn	7440-31-5	1.03%	0.03	10,274
				Ag	7440-22-4	1.03%	0.03	10,274
	Alloy 42 w/ silver plating	40.41%	1.18	Fe	7439-89-6	20.89%	0.61	208,904
				Ni	7440-02-0	18.49%	0.54	184,932
Ag				7440-22-4	1.03%	0.03	10,274	
encapsulation*	EMC	54.11%	1.58	silica	7631-86-9	39.04%	1.14	390,411
				epoxy resin	Proprietary	13.36%	0.39	133,562
				Sb ₂ O ₃	1309-64-4	1.03%	0.03	10,274
				TBBA	79-94-7	0.34%	0.01	3,425
				carbon black	1333-86-4	0.34%	0.01	3,425
	EMC GREEN	54.11%	1.58	silica	60676-86-0	35.96%	1.05	359,589
				epoxy resin	29690-82-2	6.16%	0.18	61,644
				phenol resin	9003-35-4	6.16%	0.18	61,644
				carbon black	1333-86-4	0.34%	0.01	3,425
				metal hydroxide	1309-42-8	5.48%	0.16	54,795
plating**	tin/lead process	2.05%	0.06	Sn	7440-31-5	1.71%	0.05	17,123
				Pb	7439-92-1	0.34%	0.01	3,425
	matte tin	2.05%	0.06	Sn	7440-31-5	2.05%	0.06	20,548

*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 (16-July 2018)