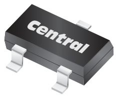
Material Composition Specification

SOT-323 Case



Device average mass . . . . **5.47 mg**

Fluctuation margin . . . . **+/-10%**

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	4.2%	0.23	Si	7440-21-3	4.2%	0.23	42,048
bond wire	gold or copper	0.37%	0.02	Au	7440-57-5	0.37%	0.02	3,656
				Cu	7440-50-8			
leadframe	alloy 42 w/ silver plating	23.77%	1.3	Fe	7439-89-6	13.71%	0.75	137,112
				Ni	7440-02-0	9.51%	0.52	95,064
				Ag	7440-22-4	0.55%	0.03	5,484
encapsulation*	EMC	67.46%	3.69	silica	7631-86-9	49.91%	2.73	499,086
				epoxy resin	Proprietary	15.72%	0.86	157,221
				Sb_2O_3	1309-64-4	1.28%	0.07	12,797
				Br	7726-95-6	0.37%	0.02	3,656
				carbon	1333-86-4	0.18%	0.01	1,828
	EMC GREEN	67.46%	3.69	silica (fused)	60676-86-0	51.94%	2.841	519,442
				epoxy resin	29690-82-2	6.75%	0.369	67,456
				phenol resin	9003-35-4	6.54%	0.358	65,433
				carbon black	1333-86-4	0.2%	0.011	2,023
				metal hydroxide	1309-42-8	2.02%	0.111	20,235
plating**	tin/lead process	4.2%	0.23	Sn	7440-31-5	3.29%	0.18	32,907
				Pb	7439-92-1	0.91%	0.05	9,141
	matte tin	4.2%	0.23	Sn	7440-31-5	4.2%	0.23	42,048

*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.

R8 (16-July 2018)