Material Composition Specification

SOD-123 Case

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	0.59%	0.06	Si	7440-21-3	0.59%	0.06	5,882
bond wire	gold or copper	0.1%	0.01	Au	7440-57-5	0.1%	0.01	980
				Cu	7440-50-8			
leadframe	alloy 42 w/ silver plating	21.18%	2.16	Fe	7439-89-6	12.27%	1.252	122,745
				Ni	7440-02-0	8.47%	0.864	84,706
				Ag	7440-22-4	0.43%	0.044	4,314
encapsulation*	EMC	77.75%	7.93	silica	7631-86-9	52.87%	5.392	528,669
				epoxy resin	29690-82-2	15.55%	1.586	155,486
				phenol resin	9003-35-4	7.77%	0.793	77,743
				Sb_2O_3	1309-64-4	0.78%	0.079	7,776
				Br	7726-95-6	0.78%	0.079	7,776
	EMC GREEN	77.75%	7.93	silica (fused)	60676-86-0	59.87%	6.106	598,657
				epoxy resin	29690-82-2	7.77%	0.793	77,743
				phenol resin	9003-35-4	7.54%	0.769	75,412
				carbon black	1333-86-4	0.23%	0.024	2,331
				metal hydroxide	1309-42-8	2.33%	0.238	23,308
plating**	tin/lead process	0.39%	0.04	Sn	7440-31-5	0.31%	0.032	3,137
				Pb	7439-92-1	0.08%	0.008	784
	matte tin	0.39%	0.04	Sn	7440-31-5	0.39%	0.04	3,922

*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.

R5 (16-July 2018)