Material Composition Specification

DIP Case

Device average mass . . . . . **327 mg**

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

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	1.38%	4.52	Si	7440-21-3	1.38%	4.52	13,830
leadframe	copper	35.53%	116.12	Cu	7440-50-8	35.53%	116.12	355,302
die attach	high temperature solder paste	3.0%	9.81	Pb	7439-92-1	2.77%	9.07	27,736
				Sn	7440-31-5	0.15%	0.49	1,499
				Ag	7440-22-4	0.07%	0.25	750
encapsulation*	EMC	59.76%	195.3	silica	7631-86-9	40.63%	132.8	406,329
				epoxy resin	29690-82-2	11.95%	39.07	119,514
				phenol resin	9003-35-4	5.98%	19.53	59,757
				Sb_2O_3	1309-64-4	0.6%	1.95	5,975
				Br	7726-95-6	0.6%	1.95	5,975
	EMC GREEN	59.76%	195.3	silica (fused)	60676-86-0	46.01%	150.38	460,118
				epoxy resin	29690-82-2	5.98%	19.53	59,753
				phenol resin	9003-35-4	5.8%	18.94	57,963
				carbon black	1333-86-4	0.18%	0.59	1,792
				metal hydroxide	1309-42-8	1.79%	5.86	17,924
plating**	tin/lead process	0.33%	1.09	Sn	7440-31-5	0.27%	0.87	2,665
				Pb	7439-92-1	0.07%	0.22	667
	matte tin	0.33%	1.09	Sn	7440-31-5	0.33%	1.09	3,332

*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.