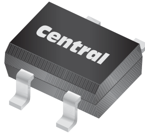
Material Composition Specification

HD DIP Case



Device average mass . . . . 126.8 mg

Fluctuation margin . . . . +/-10%

Component	Material	Material (%wt)	Material (mg)	Substance	CAS No.	Substance (%wt)	Substance (mg)	Substance (ppm)
active device	doped Si	3.38%	4.28	Si	7440-21-3	3.38%	4.28	33,754
leadframe	Cu alloy	33.5%	42.49	Cu	7440-50-8	33.44%	42.405	334,424
				Fe	7439-89-6	0.05%	0.064	505
				P	7723-14-0	0.01%	0.018	142
die attach	high temperature solder paste	7.16%	9.08	Pb	7439-92-1	6.624%	8.399	66,238
				Sn	7440-31-5	0.358%	0.454	3,580
				Ag	7440-22-4	0.179%	0.227	1,790
encapsulation*	EMC	55.48%	70.34	SiO_2	14808-60-7	37.72%	47.834	377,240
				epoxy resin	29690-82-2	10.54%	13.365	105,402
				phenol resin	9003-35-4	5.55%	7.034	55,473
				Sb_2O_3	1309-64-4	0.55%	0.703	5,544
				Br	7726-95-6	1.11%	1.407	11,096
	EMC GREEN	55.48%	70.34	silica (fused)	60676-86-0	42.72%	54.165	427,169
				epoxy resin	29690-82-2	5.55%	7.034	55,473
				phenol resin	9003-35-4	5.38%	6.823	53,809
				carbon black	1333-86-4	0.17%	0.211	1,664
				metal hydroxide	1309-42-8	1.66%	2.11	16,640
plating**	tin/lead process	0.48%	0.61	Sn	7440-31-5	0.38%	0.488	3,849
				Pb	7439-92-1	0.10%	0.122	962
	matte tin	0.48%	0.61	Sn	7440-31-5	0.48%	0.61	4,811

*EMC GREEN molding compound is Halogen-Free.

**For Lead Free plating, add suffix “LEAD 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.