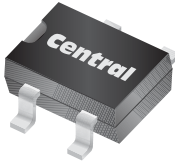


# Material Composition Specification

## SMDIP Case



Device average mass ..... 300 mg  
 Fluctuation margin ..... +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	1.2%	3.6	Si	7440-21-3	1.2%	3.6	12,000
leadframe	copper	21.21%	63.63	Cu	7440-50-8	21.21%	63.63	212,099
die attach	high temperature solder paste	0.86%	2.6	Pb	7439-92-1	0.8%	2.4	8,000
				Sn	7440-31-5	0.04%	0.13	433
				Ag	7440-22-4	0.02%	0.07	217
encapsulation*	EMC	74.39%	223.18	silica	7631-86-9	50.59%	151.76	505,858
				epoxy resin	29690-82-2	14.88%	44.64	148,789
				phenol resin	9003-35-4	7.44%	22.32	74,393
				Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	0.74%	2.23	7,439
				Br	7726-95-6	0.74%	2.23	7,439
	EMC GREEN	74.39%	223.18	silica (fused)	60676-86-0	57.28%	171.85	572,821
				epoxy resin	29690-82-2	7.44%	22.32	74,392
				phenol resin	9003-35-4	7.22%	21.65	72,160
				carbon black	1333-86-4	0.22%	0.67	2,231
				metal hydroxide	1309-42-8	2.23%	6.69	22,315
plating**	tin/lead process	2.33%	7.0	Sn	7440-31-5	1.87%	5.6	18,666
				Pb	7439-92-1	0.47%	1.4	4,667
	matte tin	2.33%	7.0	Sn	7440-31-5	2.33%	7.0	23,333

\*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.

R3 (3-June 2011)