Material Composition Specification

DO-15 Case

Device average mass . . . . . 401 mg
Fluctuation margin . . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	0.42%	1.68	Si	7440-21-3	0.42%	1.68	4,190
die attach	high temperature solder	0.7%	2.81	Pb	7439-92-1	0.65%	2.6	6,484
				Sn	7440-31-5	0.03%	0.14	349
				Ag	7440-22-4	0.02%	0.07	175
leadframe	Cu alloy	73.57%	295	Cu	7440-50-8	73.49%	294.7	734,931
				Fe	7439-89-6	0.07%	0.3	748
encapsulation*	EMC	21.2%	85	silica	7631-86-9	16.31%	65.4	163,096
				epoxy resin	29690-82-2	2.12%	8.5	21,198
				phenol resin	9003-35-4	2.05%	8.24	20,549
				Sb_2O_3	1309-64-4	0.36%	1.43	3,566
				Br	7726-95-6	0.36%	1.43	3,566
	EMC GREEN	21.2%	85	silica	7631-86-9	16.31%	65.4	163,096
				epoxy resin	29690-82-2	2.12%	8.5	21,198
				phenol resin	9003-35-4	2.05%	8.24	20,549
				carbon black	1333-86-4	0.06%	0.26	648
				metal hydroxide	1309-42-8	0.65%	2.6	6,484
plating**	tin/lead process	4.1%	16.46	Sn	7440-31-5	3.28%	13.17	32,844
				Pb	7439-92-1	0.82%	3.29	8,205
	matte tin	4.1%	16.46	Sn	7440-31-5	4.1%	16.46	41,048
ink	N/A	0.01%	0.04	2-propenic acid	53192-18-0	0.01%	0.022	55
				Al	7429-90-5	0.001%	0.006	15
				silica	112945-52-5	0.0002%	0.001	2
				methanone	947-19-3	0.0002%	0.001	2
				isoamyl 4-benzoate	21245-01-2	0.002%	0.01	25

*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.