

Material Composition Specification

CASE A



Device average mass 1.2455 g
 Fluctuation margin +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	0.25%	3.2	Si	7440-21-3	0.22%	2.78	2,232
				Pb	7439-92-1	0.03%	0.42	337
leadframe	copper	57.25%	713	Cu	7440-50-8	57.25%	713	572,461
die attach	high temperature solder	1.82%	22.691	Pb	7439-92-1	1.68%	20.97	16,837
				Ag	7440-22-4	0.04%	0.53	426
				Sn	7440-31-5	0.10%	1.191	956
encapsulation	EMC	27.78%	346	silica	7631-86-9	19.17%	238.74	191,682
				epoxy resin	29690-82-2	4.17%	51.9	41,670
				phenol resin	9003-35-4	2.78%	34.6	27,780
				Sb ₂ O ₃	1309-64-4	0.83%	10.38	8,334
				bromine	7726-95-6	0.56%	6.92	5,556
				carbon	Proprietary	0.28%	3.46	2,778
case	plastic	12.28%	153	PBT	26062-94-2	7.37%	91.8	73,705
				silica	7631-86-9	3.07%	38.25	30,711
				2,4,6-Tris	25713-60-4	1.23%	15.3	12,284
				Sb ₂ O ₃	1309-64-4	0.61%	7.65	6,142
leadframe plating*	tin/lead process	0.61%	7.58	Sn	7440-31-5	0.49%	6.064	4,869
	matte tin	0.61%	7.58	Pb	7439-92-1	0.12%	1.516	1,217
				Sn	7440-31-5	0.61%	7.58	6,086
ink	N/A	0.002%	0.029	2-propenic acid	53192-18-0	0.0016%	0.02	16
				Al	7429-90-5	0.0004%	0.005	4
				silica	7631-86-9	0.0001%	0.001	1
				methanone	947-19-3	0.0001%	0.001	1
				isoamyl 4-benzoate	21245-01-2	0.0002%	0.002	2

*For Lead Free plating, add suffix "PBFREE" 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.

R0 (26-September 2017)