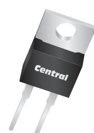
Material Composition Specification

TO-220-2 Case



Device average mass . . . . 1.95 g

Fluctuation margin . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped SiC	0.38%	7.5	SiC	409-21-2	0.38%	7.5	3,846
bond wire	aluminum	0.13%	2.5	Al	7429-90-5	0.13%	2.5	1,282
leadframe	Cu alloy	67.7%	1,320.1	Cu	7440-50-8	67.59%	1,318	675,897
				Fe	7439-89-6	0.01%	0.1	51
				P	7723-14-0	0.1%	2.0	1,026
die attach	high temperature solder	0.3%	5.9	Pb	7439-92-1	0.28%	5.46	2,800
				Sn	7440-31-5	0.01%	0.29	149
				Ag	7440-22-4	0.01%	0.15	77
encapsulation*	EMC GREEN	30.77%	600	silica	7631-86-9	23.08%	450	230,769
				epoxy resin	Proprietary	4.77%	93	47,692
				epoxy polymer	Proprietary	2.31%	45	23,077
				Sb_2O_3	1309-64-4	0.52%	10.2	5,231
				carbon black	1333-86-4	0.09%	1.8	923
plating	matte tin	0.72%	14	Sn	7440-31-5	0.72%	14	7,179

*EMC GREEN molding compound is Halogen-Free.

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 (6-May 2013)