

# Material Composition Specification

## SOIC-16 Case



Device average mass . . . . . 145 mg  
 Fluctuation margin . . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	2.66%	3.86	Si	7440-21-3	2.66%	3.86	26,621
bond wire	gold	0.28%	0.4	Au	7440-57-5	0.28%	0.4	2,759
leadframe	copper	31.38%	45.5	Cu	7440-50-8	31.38%	45.5	313,793
die attach	silver epoxy	0.3%	0.44	Ag	7440-22-4	0.24%	0.35	2,414
				epoxy resin	Proprietary	0.06%	0.09	621
encapsulation	EMC	63.79%	92.5	silica (fused)	60676-86-0	44.9%	65.1	448,966
				epoxy resin	Proprietary	15.86%	23.0	158,621
				Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	1.24%	1.8	12,414
				TBBA	79-94-7	1.52%	2.2	15,172
plating*	tin/lead process	1.59%	2.3	Sn	7440-31-5	1.34%	1.95	13,448
				Pb	7439-92-1	0.24%	0.35	2,414
	matte tin	1.59%	2.3	Sn	7440-31-5	1.59%	2.3	15,862

\*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.

### 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 (16-July 2018)