

# Material Composition Specification

## MELF Case



Device average mass . . . . . 150 mg  
 Fluctuation margin . . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	0.17%	0.25	Si	7440-21-3	0.17%	0.25	1,667
leadframe	Fe alloy	62.67%	94	Fe	7439-89-6	27.73%	41.6	277,333
				Ni	7440-02-0	24.6%	36.9	246,000
				Cu	7440-50-8	10.33%	15.5	103,333
encapsulation	glass	36.4%	54.6	Pb	7439-92-1	20%	30	200,000
				O	7782-44-7	8.73%	13.1	87,333
				Si	7440-21-3	6.67%	10	66,667
				K	7440-09-7	1.0%	1.5	10,000
plating*	tin/lead process	0.77%	1.15	Sn	7440-31-5	0.61%	0.92	6,133
				Pb	7439-92-1	0.15%	0.23	1,533
	matte tin	0.77%	1.15	Sn	7440-31-5	0.77%	1.15	7,667

\*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.

R5 (16-July 2018)