

# Material Composition Specification

## GPR-1A Case



Device average mass . . . . . 342 mg

Fluctuation margin . . . . . +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	0.34%	1.16	Si	7440-21-3	0.34%	1.16	3,392
axial lead	wire	80.7%	276	Cu	7440-50-8	80.65%	275.83	806,520
				Zn	7440-66-6	0.05%	0.17	497
	moly slug	13.39%	45.8	Mo	7439-98-7	13.39%	45.8	133,918
die attach	solder	0.5%	1.71	Cu	7440-50-8	0.4%	1.36	3,977
				Ag	7440-22-4	0.08%	0.26	760
				P	7723-14-0	0.03%	0.09	263
encapsulation	glass	2.92%	10	Zn	7440-66-6	1.4%	4.8	14,049
				O	7782-44-7	1.07%	3.67	10,741
				B	7440-42-8	0.28%	0.95	2,780
				Si	7440-21-3	0.11%	0.38	1,112
				Pb	7439-92-1	0.06%	0.2	585
plating*	tin/lead process	2.05%	7.0	Sn	7440-31-5	1.74%	5.96	17,427
				Pb	7439-92-1	0.3%	1.04	3,041
	matte tin	2.05%	7.0	Sn	7440-31-5	2.05%	7.0	20,468

\*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.

R4 (16-July 2018)