

Material Composition Specification

GPR-4A Case

Pb (lead)-free plating* 

Device average mass 947 mg

Fluctuation margin +/-10%

Component	Material	Material		Substance	CAS No.	Substance		
		(%wt)	(mg)			(%wt)	(mg)	(ppm)
active device	doped Si	0.26%	2.48	Si	7440-21-3	0.26%	2.48	2619
lead wire	copper	79.56%	753.39	Cu	7440-50-8	79.51%	752.94	795079
				Zn	7440-66-6	0.05%	0.45	475
die attach	solder	0.57%	5.38	Cu	7440-50-8	0.45%	4.3	4541
				Ag	7440-22-4	0.09%	0.81	855
				P	7723-14-0	0.03%	0.27	285
encapsulation	moly slug	14.21%	134.6	Mo	7439-98-7	14.21%	134.6	142133
case	glass powder	4.01%	38	ZnO	1314-13-2	2.41%	22.8	24076
				B ₂ O ₃	1303-86-2	1.20%	11.4	12038
				SiO ₂	14808-60-7	0.32%	3.04	3210
				PbO	1317-36-8	0.08%	0.76	803
*plating	tin lead solder	1.39%	13.17	Sn	7440-31-5	1.18%	11.2	11827
				Pb	7439-92-1	0.21%	1.97	2080
	100% tin, Pb-free	1.39%	13.17	Sn	7440-31-5	1.39%	13.17	13907

*Specify Lead-Free when ordering 100% tin (Pb-free) plating.

Disclaimer

The information provided in this Material Composition data sheet is, to our knowledge, correct. However, there is no guarantee to completeness or accuracy, as some information is derived from data sources outside the company.