

Material Composition Declaration

Package Information

Package	Package Weight (mg)	Terminal Finish	MSL Rating
GBPC-W	18000	Silver (Ag)	N/A

Product Group

Type No.	Description
GBPC1000W – GBPC1016W	Bridge Rectifier 10A 50V – 1600V
GBPC1500W – GBPC1516W	Bridge Rectifier 15A 50V – 1600V
GBPC2500W – GBPC2516W	Bridge Rectifier 25A 50V – 1600V
GBPC3500W – GBPC3516W	Bridge Rectifier 35A 50V – 1600V
GBPC4000W – GBPC4016W	Bridge Rectifier 40A 50V – 1600V
GBPC5000W – GBPC5016W	Bridge Rectifier 50A 50V – 1600V

Component	Material	Substance	CAS No.	Material Mass (%)	Material Mass (mg)	Component Mass (%)	Component Mass (mg)	PPM
Die	Doped Silicon*	Si	7440-21-3	100.00	40.00	0.22	40.00	2222
Die Attach	Solder Alloy	Pb	7439-92-1	92.50	197.95	1.19	214.00	10997
		Sn	7440-31-5	5.00	10.70			594
		Ag	7440-22-4	2.50	5.35			297
Leadframe	Copper Alloy	Cu	7440-50-8	99.80	1818.26	10.12	1821.90	101014
		Fe	7439-89-6	0.12	2.19			121
		Zn	7440-66-6	0.08	1.46			81
Plating	Silver	Ag	7440-22-4	100.00	2.10	0.01	2.10	117
Jumper	Copper Alloy	Cu	7440-50-8	99.99	845.92	4.70	846.00	46995
		Fe	7439-89-6	0.01	0.08			5
Encapsulation	EMC	SiO ₂	14808-60-7	64.66	4833.98	41.53	7476.00	268555
		Epoxy Resin	29690-82-2	29.40	2197.94			122108
		Brominated Epoxy Resin	6386-73-8	2.97	222.04			12335
		Sb ₂ O ₃	1309-64-4	2.97	222.04			12335
Case	Epoxy Case with Heatsink	Silica	7631-86-9	61.10	4643.60	42.22	7600.00	257978
		Epoxy Resin	29690-82-2	26.19	1990.44			110580
		Al	7429-90-5	12.71	965.96			53664

Tolerance ±10%

*Dopant and metallization of the silicon die are not reported in this statement where their concentration is less than the minimum reportable level per EIA JIG-101.

Data disclosed herewith is approximate and is based on information from suppliers surveys, Material Safety Datasheet, engineering calculations and measurements. Won-Top Electronics(WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. WTE reserves the right to change any or all information herein without further notice.

RoHS Declaration

The European Parliament and of the Council on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronics Equipment (RoHS) directive restricts the concentration of Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBD), Bis(2-ethylhexyl) Phthalate (DEHP), Butyl Benzyl Phthalate (BBP), Dibutyl Phthalate (DBP) and Diisobutyl Phthalate (DIBP) to 0.1%(1000 PPM) and restricts the concentration of Cadmium (Cd) to 0.01%(100 PPM) in homogeneous materials of electronics products.

The product group listed above and the homogenous materials are compliant with the Directive 2011/65/EU and amending EU Directive 2015/863/EU. WTE warrants that all its packing, components and/or products supplied to the Customer and/or its affiliated companies or designated contractors do not contain these hazardous substances in quantity levels higher than or equal to the thresholds to these directives.

Exemptions as declared for the directive are:

- 7(a) Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
- 7(c)-I Lead in glass (applicable for glass passivated silicon die).