

Material Composition Declaration

Package Information

Package	Package Weight (mg)	Terminal Finish	MSL Rating
KBPC-W	28000	Silver (Ag)	N/A

Product Group

Type No.	Description
KBPC1000W – KBPC1012W	Bridge Rectifier 10A 50V – 1200V
KBPC1500W – KBPC1512W	Bridge Rectifier 15A 50V – 1200V
KBPC2500W – KBPC2512W	Bridge Rectifier 25A 50V – 1200V
KBPC3500W – KBPC3512W	Bridge Rectifier 35A 50V – 1200V
KBPC4000W – KBPC4012W	Bridge Rectifier 40A 50V – 1200V
KBPC5000W – KBPC5012W	Bridge Rectifier 50A 50V – 1200V

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	0.14	40.00	1429
Die Attach	Solder Alloy	Pb	7439-92-1	92.50	197.95	0.76	214.00	7070
		Sn	7440-31-5	5.00	10.70			382
		Ag	7440-22-4	2.50	5.35			191
Leadframe	Copper Alloy	Cu	7440-50-8	99.80	1818.26	6.51	1821.90	64938
		Fe	7439-89-6	0.12	2.19			78
		Zn	7440-66-6	0.08	1.46			52
Plating	Silver	Ag	7440-22-4	100.00	2.10	0.01	2.10	75
Jumper	Copper Alloy	Cu	7440-50-8	99.99	845.92	3.02	846.00	30211
		Fe	7439-89-6	0.01	0.08			3
Encapsulation	EMC	SiO ₂	14808-60-7	64.66	6838.44	37.77	10576.00	244230
		Epoxy Resin	29690-82-2	29.40	3109.34			111048
		Brominated Epoxy Resin	6386-73-8	2.97	314.11			11218
		Sb ₂ O ₃	1309-64-4	2.97	314.11			11218
Case	Metal Case	Zn	7440-66-6	94.95	13767.75	51.79	14500.00	491705
		Al	7429-90-5	4.00	580.00			20714
		Cu	7440-50-8	1.00	145.00			5179
		Fe	7439-89-6	0.05	7.25			259

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).