



Material Composition Declaration

Package Information

Package	Package Weight (mg)	Terminal Finish	MSL Rating
DPAK	300	Matte Tin (Sn)	1

Product Group

Type No.	Description
MBRD320/S – MBRD3100/S	Diode Schottky 3A 20V – 100V
MBRD520/S – MBRD5100/S	Diode Schottky 5A 20V – 100V
MBRD620CT – MBRD6100CT	Diode Schottky 6A 20V – 100V
MBRD820/S – MBRD8100/S	Diode Schottky 8A 20V – 100V
MBRD1020/S – MBRD10100/S	Diode Schottky 10A 20V – 100V
MBRD1020CT – MBRD10200CT	Diode Schottky 10A 20V – 200V
MBRD1520CT – MBRD15100CT	Diode Schottky 15A 20V – 100V
MURD320/S – MURD360/S	Diode Superfast 3A 200V – 600V
MURD520/S – MURD560/S	Diode Superfast 5A 200V – 600V
MURD620CT – MURD660CT	Diode Superfast 6A 200V – 600V
MURD820CT – MURD860CT	Diode Superfast 8A 200V – 600V
MURD1020CT – MURD1060CT	Diode Superfast 10A 200V – 600V

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	6.24	2.08	6.24	20800
Die Attach	Solder Alloy	Pb	7439-92-1	92.50	2.25	0.81	2.43	7500
		Sn	7440-31-5	5.00	0.12			400
		Ag	7440-22-4	2.50	0.06			200
Wire Bond	Aluminum Alloys	Al	7429-90-5	100.00	2.52	0.84	2.52	8400
Leadframe	Copper Alloy	Cu	7440-50-8	97.50	150.55	51.47	154.41	501833
		Fe	7439-89-6	2.40	3.71			12367
		Zn	7440-66-6	0.10	0.15			500
Plating	Matte Tin	Sn	7440-31-5	100.00	1.65	0.55	1.65	5500
Encapsulation	EMC	Silica	7631-86-9	74.91	99.44	44.25	132.75	331467
		Epoxy Resin	29690-82-2	23.13	30.71			102367
		Sb ₂ O ₃	1309-64-4	0.98	1.3			4333
		Brominated Epoxy Resin	6386-73-8	0.98	1.3			4333

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).