



Material Composition Declaration

Package Information

Package	Package Weight (mg)	Terminal Finish	MSL Rating
DO-41	350	Matte Tin (Sn)	N/A

Product Group

Type No.	Description
1N5817 – 1N5819	Diode Schottky 1A 20V – 40V
SB120 – SB1200	Diode Schottky 1A 20V – 200V
SR120 – SR1100	Diode Schottky 1A 20V – 100V
SB220S – SB2200S	Diode Schottky 2A 20V – 200V
SF11 – SF17	Diode Superfast 1A 50V – 600V
HER101 – HER108	Diode Ultrafast 1A 50V – 1000V
UF4001 – UF4007	Diode Ultrafast 1A 50V – 1000V
UF4001G – UF4007G	Diode Ultrafast 1A 50V – 1000V
1N4933 – 1N4937	Diode Fast 1A 50V – 600V
1N4933G – 1N4937G	Diode Fast 1A 50V – 600V
BA157 – BA159	Diode Fast 1A 400V – 1000V
FR101 – FR107	Diode Fast 1A 50V – 1000V
1N4001 – 1N4007	Diode Standard 1A 50V – 1000V
1N4001G – 1N4007G	Diode Standard 1A 50V – 1000V
BY133	Diode Standard 1A 1300V
P4KE Series	Diode TVS 400W
1N4728A – Z1330A	Diode Zener 1.0W
1N5913B – 1N5956B	Diode Zener 1.5W
2EZ2.7D5 – 2EZ330D5	Diode Zener 2.0W

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	0.91	0.26	0.91	2600
Die Attach	Solder Alloy	Pb	7439-92-1	92.50	1.23	0.38	1.33	3515
		Sn	7440-31-5	5.00	0.07			190
		Ag	7440-22-4	2.50	0.03			95
Leadframe	Copper Alloy	Cu	7440-50-8	99.91	209.08	59.79	209.27	597376
		Fe	7439-89-6	0.09	0.19			538
Plating	Matte Tin	Sn	7440-31-5	100.00	4.48	1.28	4.48	12800
Encapsulation	EMC	Silica	7631-86-9	74.86	100.32	38.29	134.01	286628
		Epoxy Resin	29690-82-2	23.14	31.01			88600
		Sb ₂ O ₃	1309-64-4	1.00	1.34			3829
		Brominated Epoxy Resin	6386-73-8	1.00	1.34			3829

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) 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. 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 this directive.

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).