



## Material Composition Declaration

### Package Information

Package	Package Weight (mg)	Terminal Finish	MSL Rating
DO-201AD/DO-201AE	1200	Matte Tin (Sn)	N/A

### Product Group

Type No.	Description
1N5820 – 1N5822	Diode Schottky 3A 20V – 40V
SB320 – SB3200	Diode Schottky 3A 20V – 200V
SR320 – SR3100	Diode Schottky 3A 20V – 100V
SB520 – SB5200	Diode Schottky 5A 20V – 200V
SR520 – SR5100	Diode Schottky 5A 20V – 100V
SR820 – SR8100	Diode Schottky 8A 20V – 100V
SD1030 – SD1045	Diode Schottky 10A 30V – 45V
SF31 – SF37	Diode Superfast 3A 50V – 600V
SF51 – SF57	Diode Superfast 5A 50V – 600V
HER301 – HER308	Diode Ultrafast 3A 50V – 1000V
UF5400 – UF5408	Diode Ultrafast 3A 50V – 1000V
UF5400G – UF5408G	Diode Ultrafast 3A 50V – 1000V
HER501 – HER508	Diode Ultrafast 5A 50V – 1000V
FR301 – FR307	Diode Fast 3A 50V – 1000V
1N5400 – 1N5408	Diode Standard 3A 50V – 1000V
BY255	Diode Standard 3A 1300V
BY550-50 – BY550-1000	Diode Standard 5A 50V – 1000V
1.5KE Series	Diode TVS 1500W
1N5341B – 1N5388B	Diode Zener 5.0W

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	3.36	0.28	3.36	2800
Die Attach	Solder Alloy	Pb	7439-92-1	92.50	6.33	0.57	6.84	5273
		Sn	7440-31-5	5.00	0.34			285
		Ag	7440-22-4	2.50	0.17			143
Leadframe	Copper Alloy	Cu	7440-50-8	97.78	791.90	67.49	809.88	659917
		Fe	7439-89-6	2.22	17.98			14983
Plating	Matte Tin	Sn	7440-31-5	100.00	6.36	0.53	6.36	5300
Encapsulation	EMC	Silica	7631-86-9	74.86	279.65	31.13	373.56	233039
		Epoxy Resin	29690-82-2	23.14	86.44			72035
		Sb <sub>2</sub> O <sub>3</sub>	1309-64-4	1.00	3.74			3113
		Brominated Epoxy Resin	6386-73-8	1.00	3.74			3113

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).