



Material Composition Declaration

Package Information

Package	Package Weight (mg)	Terminal Finish	MSL Rating
SOD-123FL/SOD-123HE	17	Matte Tin (Sn)	1

Product Group

Type No.	Description
MBR0520L – MBR0540L	Diode Schottky 0.5A 20V – 40V
SS0520FL – SS05100FL	Diode Schottky 0.5A 20V – 100V
MBR120L – MBR140L	Diode Schottky 1A 20V – 40V
SS1020FL – SS10200FL	Diode Schottky 1A 20V – 200V
SS2020FL – SS20200FL	Diode Schottky 2A 20V – 200V
SS2020HE – SS20100HE	Diode Schottky 2A 20V – 100V
SS3020HE – SS30100HE	Diode Schottky 3A 20V – 100V
ES1000FL – ES1006FL	Diode Superfast 1A 50V – 600V
US1000FL – US1010FL	Diode Ultrafast 1A 50V – 1000V
RS1000FL – RS1010FL	Diode Fast 1A 50V – 1000V
GS1000FL – GS1010FL	Diode Standard 1A 50V – 1000V
SMF Series	Diode TVS 200W
SML4728A – SMZ1330A	Diode Zener 1W

Component	Material	Substance	CAS No.	Material Mass (%)	Material Mass (mg)	Component Mass (%)	Component Mass (mg)	PPM
Die	Silicon	Si	7440-21-3	100.00	0.68	4.00	0.68	40000
Die Attach	Solder Alloy	Pb	7439-92-1	92.50	0.56	3.53	0.60	32647
		Sn	7440-31-5	5.00	0.03			1765
		Ag	7440-22-4	2.50	0.02			882
Leadframe	Copper Alloy	Cu	7440-50-8	97.75	5.73	34.45	5.86	336950
		Fe	7439-89-6	2.10	0.12			7239
		Zn	7440-66-6	0.15	0.01			517
Plating	Matte Tin	Sn	7440-31-5	100.00	0.31	1.82	0.31	18235
Encapsulation	EMC	Silica	7631-86-9	79.00	7.54	56.20	9.55	443794
		Epoxy Resin	29690-82-2	20.00	1.91			112353
		Carbon Black	1333-86-4	1.00	0.10			5618

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).