

Descriptions

SKY diodes can be used in a wide range of applications which like consumer electronic products, automotive industries, munitions, telecommunications, aerospace industries, and intelligent control systems.

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering: 260°C/10 seconds at terminals

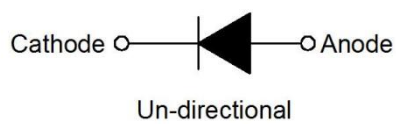
Applications

- Low Voltage
- High-Frequency Inverters
- Free Wheeling
- Polarity Protection

Mechanical Characteristics

- Package: SMB/DO-214AA
- Case Material: "Green" Molding Compound
- UL Flammability Classification Rating 94V-0
- Polarity: Color band denotes cathode except bi-directional models
- Weight: 0.10g
- Terminal Connections: See Diagram Below
- Marking Information: See Below

Equivalent Circuit & Pinning



Electrical Characteristics (T=25°C)

Parameters	Symbol	SS520B	SS540B	SS560B	SS5100B	SS5150B	SS5200B	Unit
Maximum repetitive peak reverse voltage	VRRM	20	40	60	100	150	200	V
Maximum RMS voltage	VRMS	14	28	42	70	105	140	V
Maximum DC blocking voltage	VDC	20	40	60	100	150	200	V
Maximum average forward rectified current	IF(AV)	5.0						A
Non-repetitive Peak forward surge current 8.3 ms single half sine-wave	IFSM	100						A
Max. forward voltage @IF=5.0A	VF	0.6		0.75	0.85		0.95	V
@VDC Max.reverse current	TA=25°C	IR	500					uA
	TA=125°C		20					mA
Operation junction	Tj	-55±125						°C
Storage temperature range	TSTG	-55±150						°C

Typical Characteristics

FIG1: Io-TL Curve

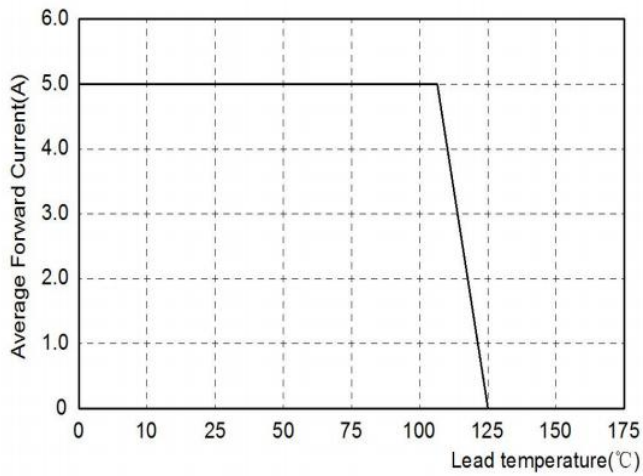


FIG2: Surge Forward Current Capability

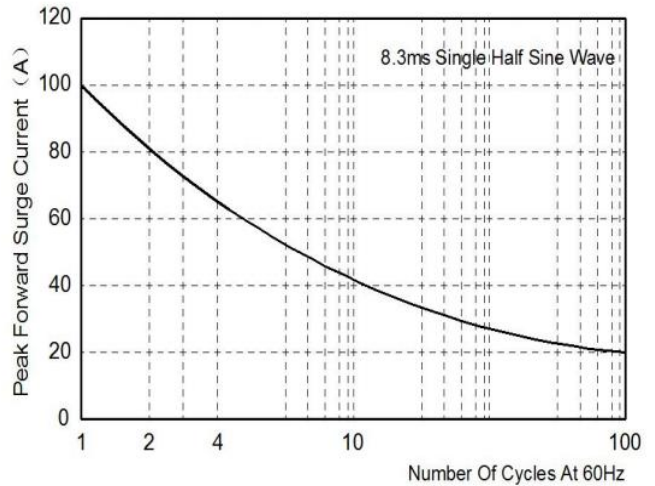


FIG3: Typical Reverse Characteristics

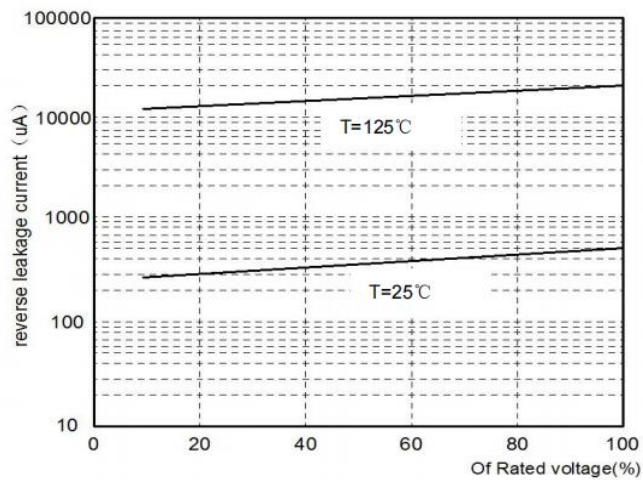
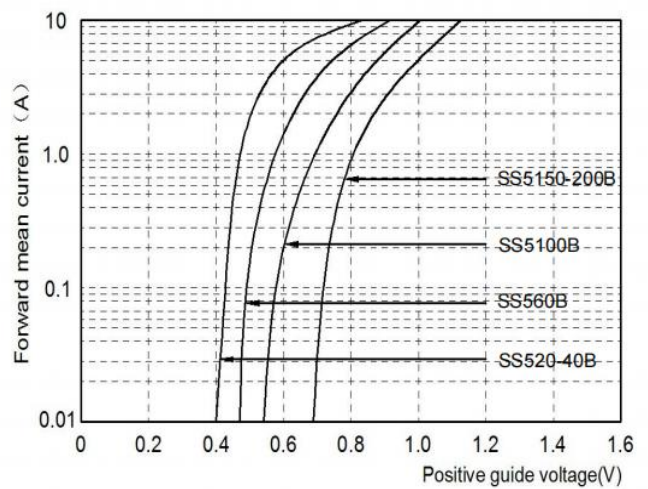


FIG4: Typical Forward Characteristics



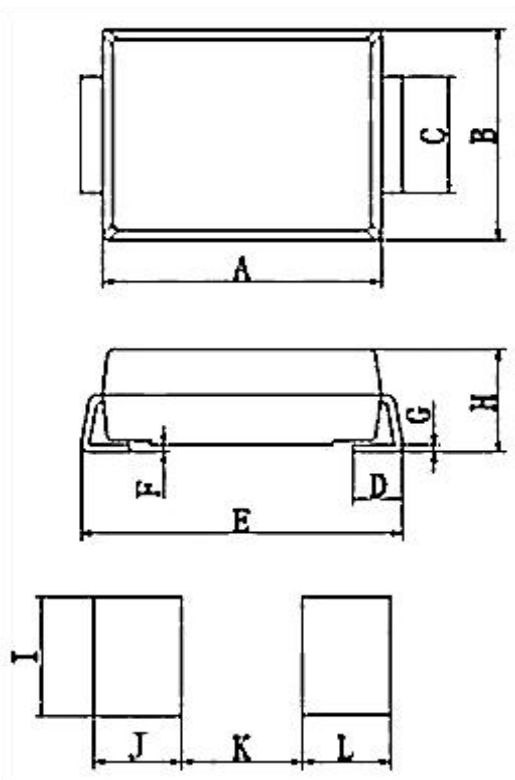
Marking Information



SS54: SS540B Marking code

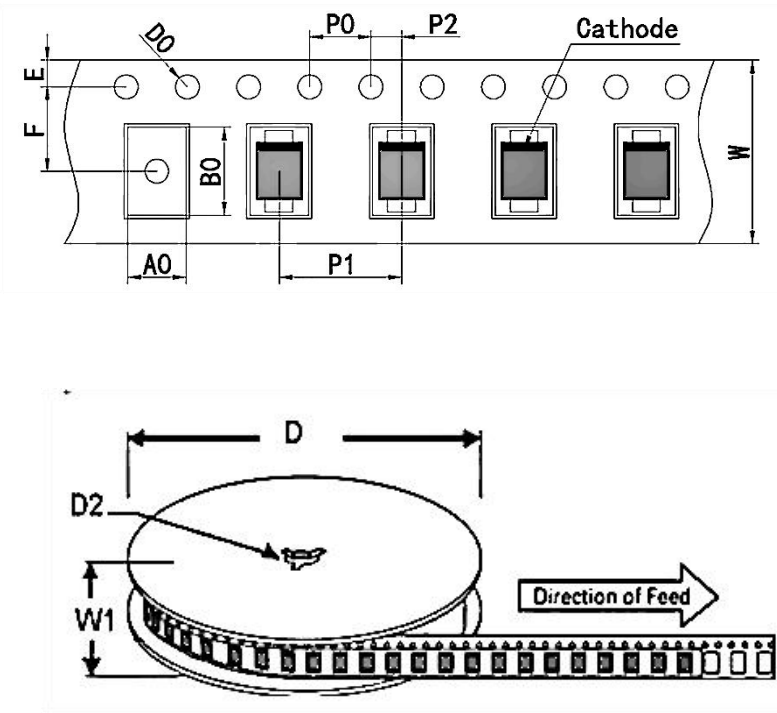
Part Number	Device Marking Code
SS520B	SS52
SS540B	SS54
SS560B	SS56
SS5100B	SS510
SS5150B	SS515
SS5200B	SS520

Package mechanical data



Ref.(mm)	Millimeters	
	Min.	Max.
A	4.22	4.70
B	3.4	3.94
C	1.9	2.1
D	0.90	1.42
E	5.21	5.59
F	0	0.23
G	0.15	0.25
H	1.95	2.60
I	2.2	/
J	2.1	/
K	/	2.74
L	2.1	/

Tape & reel specification - SMB



Ref.	Millimeters
A0	3.81±0.20
B0	5.74±0.20
C	330.00
D0	1.55±0.10
E	1.75±0.20
E1	13.50±1.00
F	5.50±0.10
P0	4.00±0.20
P1	8.00±0.20
P2	2.00±0.20
W	12.00±0.30
W1	16.00±4.00