

SINLOON®
POWER SEMICONDUCTORS

SS0520 ~ SS0540



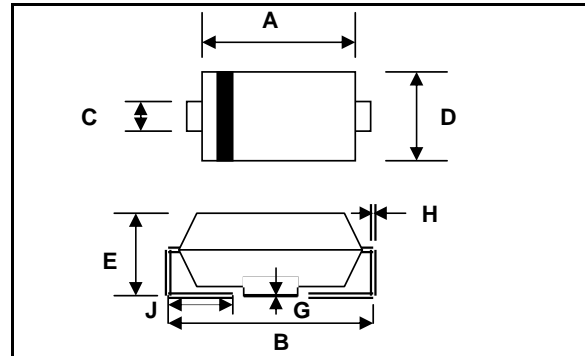
Surface Mount Schottky Barrier Diode

FEATURE

- ◆ Low Turn-on Voltage
- ◆ Fast Switching
- ◆ PN Junction Guard Ring for Transient and ESD Protection
- ◆ Design for Surface Mount Application
- ◆ Plastic Material - UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

- ◆ Case: SOD-123, Molded Plastic.
- ◆ Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ◆ Polarity: Cathode Band
- ◆ Weight: 0.01 grams (approx.)
- ◆ Marking: SS0520 B2
SS0530 B3
SS0540 B4
- ◆ Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 3.



SOD-123		
Dim.	Min.	Max.
A	3.60	3.90
B	2.50	2.80
C	1.40	1.80
D	0.50	0.70
E	-	0.20
G	0.40	-
H	0.95	1.35
J	-	0.12
All Dimensions in mm		

Mayloon Electronic Co., Ltd.,

MAXIMUM RATINGS @TA = 25°C unless otherwise specified

Characteristic	Symbol	SS0520	SS0530	SS0540	Unit
Peak Repetitive Reverse Voltage	VRRM				V
Working Peak Reverse Voltage	VRWM	20	30	40	V
DC Blocking Voltage	VR				V
Forward Continuous Current (Note 1)	IF	500			mA
Non-Repetitive Peak Forward Surtge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	5.5			A
Power Dissipation (Note 1)	P _d	410.00			mW
Typical Thermal Resistance, Junction to Ambient Air (No	RθJL	244			°C/W
Operating and Storage Temperature Range	TJ, TSTG	-65 to +125			°C

ELECTRONICAL CHARACTERISTICS @TA = 25°C unless otherwise specified

Characteristic	Symbol	SS0520	SS0530	SS0540	Unit
Forward Voltage @IF=0.1A/0.5A	VFM	0.3/0.385	0.375/0.43	-/0.51	V
Peak Reverse Leakage Current @VR = 50% / 100% DC Blocljing Voltage	IRM	75/250	20/130	10/20	µA
Typical Junction Capacitance (VR = 0V DC, f = 1MHz)	Cj	170			pF

Note: 1). Valid provided that terminals are kept at ambient temperature.



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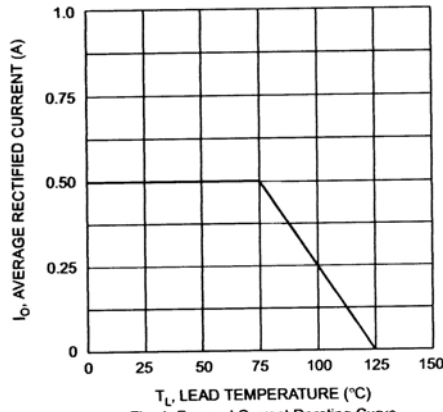


Fig. 1 Forward Current Derating Curve

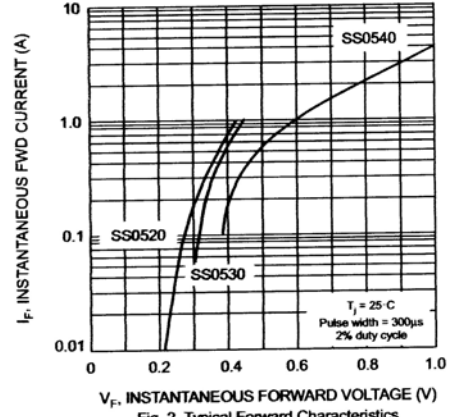


Fig. 2 Typical Forward Characteristics

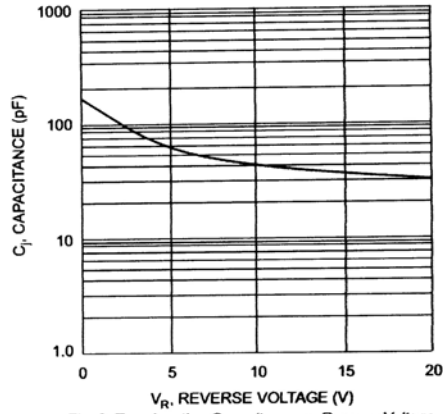


Fig. 3 Typ. Junction Capacitance vs Reverse Voltage



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MARKING INFORMATION

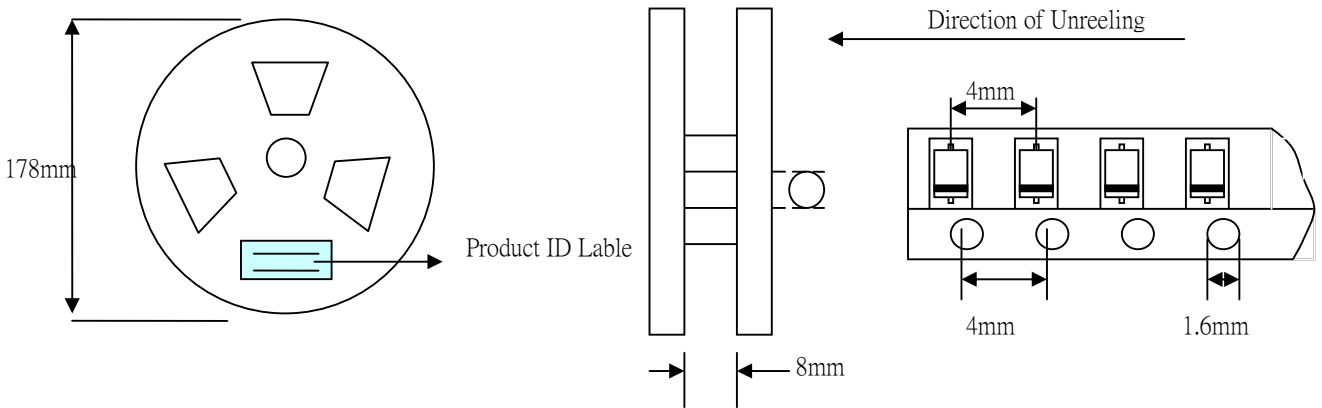
Cathode = Polarity Band
Bx = Device Code
x = 2 (SS0520)
= 3 (SS0530)
= 4 (SS0540)

RECOMMENDED FOOTPRINT

0.036 Min (0.91 Min)
0.093 Max (2.36 Max)
0.048 Min (1.22 Min)
Inches (mm)

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MARKING INFORMATION



Reel Diameter (mm)	Quantity (PCS)	Inner box Size LxWxH (mm)	Quantity (PCS)	Carton Size LxWxH (mm)	Quantity (PCS)	Approx Gross Weight (KG)
178	3,000	187x187x65	15,000	390x240x420	150,000	10.0

- Note: 1). Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
2). Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SS0520-T1	SOD-123	3000/Tape & Reel
SS0530-T1	SOD-123	3000/Tape & Reel
SS0540-T1	SOD-123	3000/Tape & Reel

- 1). Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2). To order RoHS /Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SS0520-T1-LF.