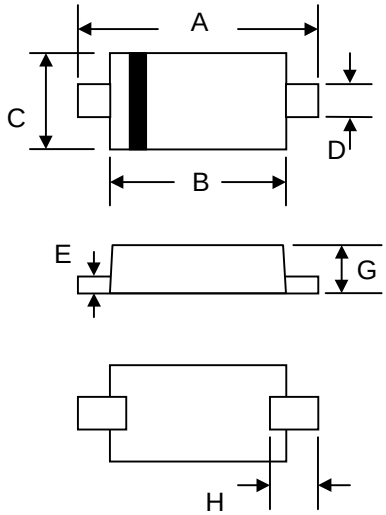
SS0520FL – SS0540FL

SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

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



SOD-123FL		
Dim	**Min**	**Max**
A	3.50	3.70
B	2.65	2.95
C	1.65	1.95
D	0.75	1.05
E	0.10	0.20
G	0.98	1.08
H	0.50	0.80
All Dimensions in mm		

Mechanical Data

- Case: SOD-123FL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.017 grams (approx.)
- Marking: SS0520FL B02
  SS0530FL B03
  SS0540FL B04
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	SS0520FL	SS0530FL	SS0540FL	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
Forward Continuous Current (Note 1)	I_F	500			mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	20			A
Power Dissipation (Note 1)	P_d	410			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	206			°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125			°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	SS0520FL	SS0530FL	SS0540FL	Unit
Forward Voltage Drop @I_F = 0.1A / 0.5A	V_{FM}	0.3 / 0.385	0.375 / 0.43	— / 0.51	V
Peak Reverse Leakage Current @V_R = 50% / 100% DC Blocking Voltage	I_{RM}	75 / 250	20 / 130	10 / 20	µA
Typical Junction Capacitance (V_R = 0V DC, f = 1MHz)	C_j	170			pF

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

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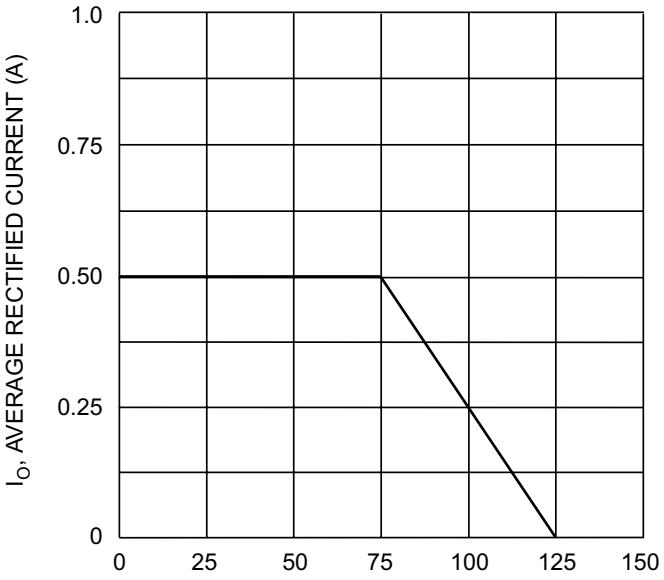


Fig. 1 Forward Current Derating Curve

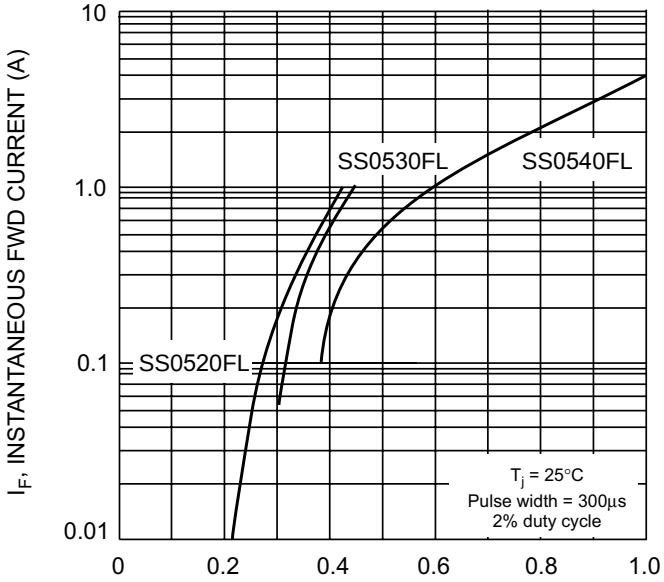


Fig. 2 Typical Forward Characteristics

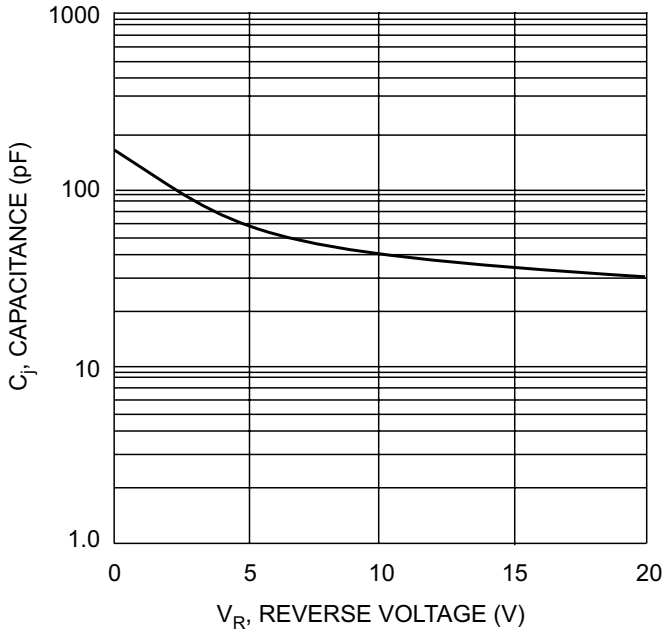


Fig. 3 Typ. Junction Capacitance vs Reverse Voltage

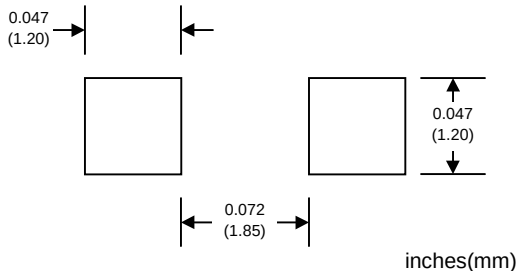
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MARKING INFORMATION



Cathode = Polarity Band
Bxx = Device Code
xx = 02 (SS0520FL)
03 (SS0530FL)
04 (SS0540FL)

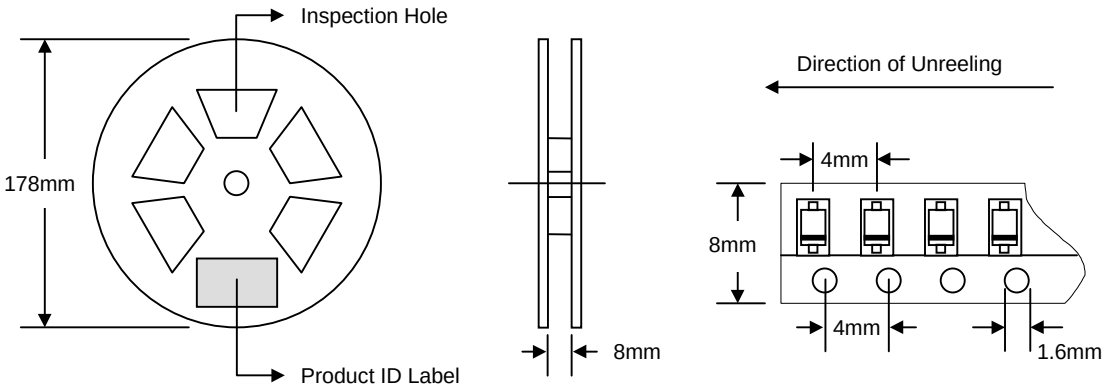
RECOMMENDED FOOTPRINT



inches(mm)

PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	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.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SS0520FL-T1	SOD-123FL	3000/Tape & Reel
SS0530FL-T1	SOD-123FL	3000/Tape & Reel
SS0540FL-T1	SOD-123FL	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, SS0520FL-T1-LF**.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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