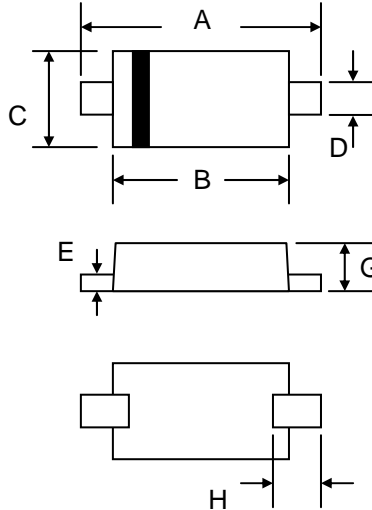


Features

- 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	3.30	3.70
B	2.60	2.95
C	1.65	1.95
D	0.75	1.35
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 @ $T_A=25^\circ\text{C}$ 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}	5.5			A
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	206			$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125			$^\circ\text{C}$

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SS0520FL	SS0530FL	SS0540FL	Unit
Forward Voltage Drop @ $I_F = 0.5\text{A}$	V_{FM}	0.52			V
Peak Reverse Leakage Current @ V_{RRM}	I_{RM}	100			μA
Typical Junction Capacitance ($V_R = 0\text{V DC}, f = 1\text{MHz}$)	C_j	170			pF

Note: 1. Mounted on FR-4 PCB with 645mm² pad size.

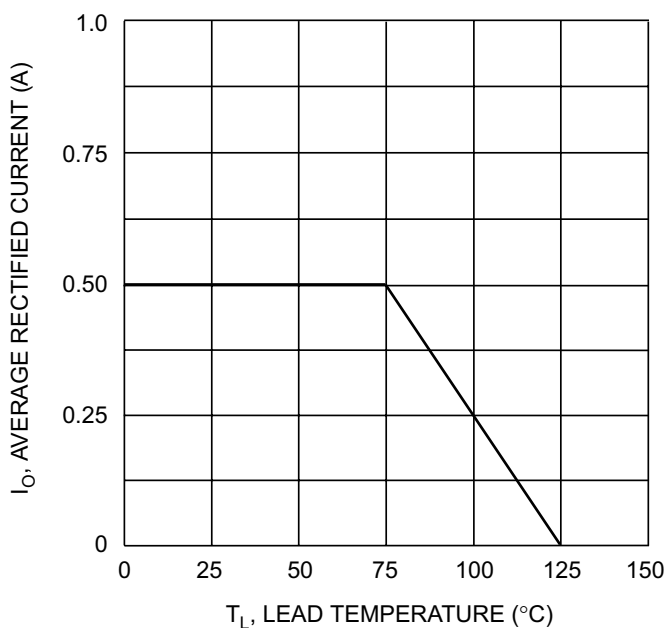


Fig. 1 Forward Current Derating Curve

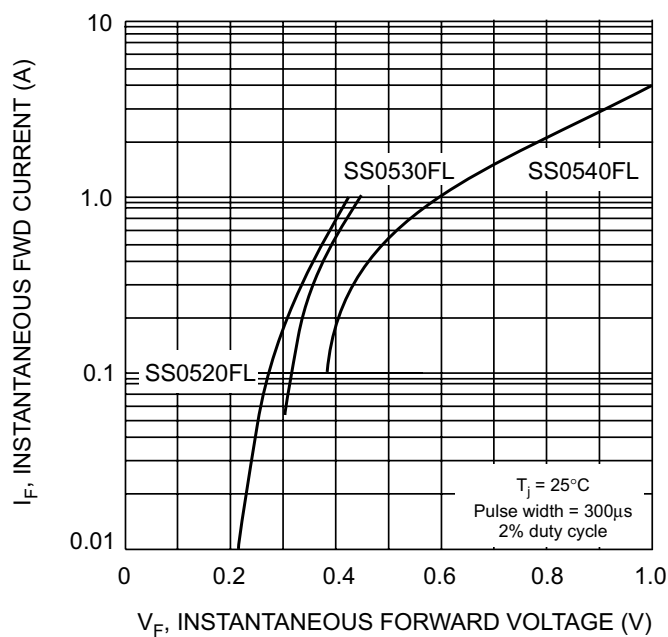


Fig. 2 Typical Forward Characteristics

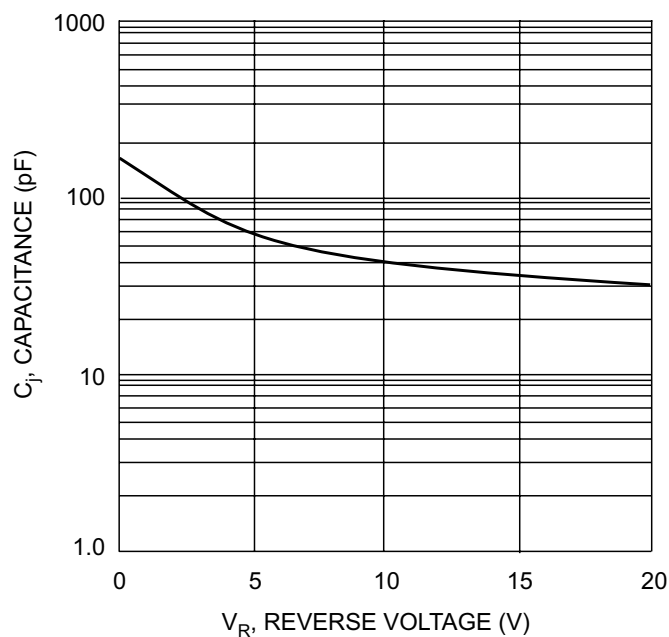


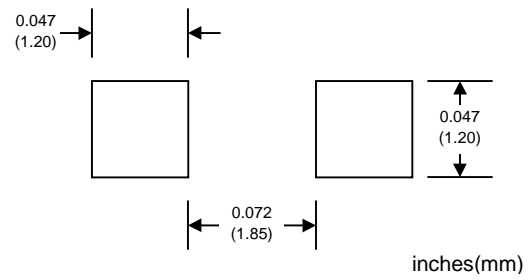
Fig. 3 Typ. Junction Capacitance vs Reverse Voltage

MARKING INFORMATION



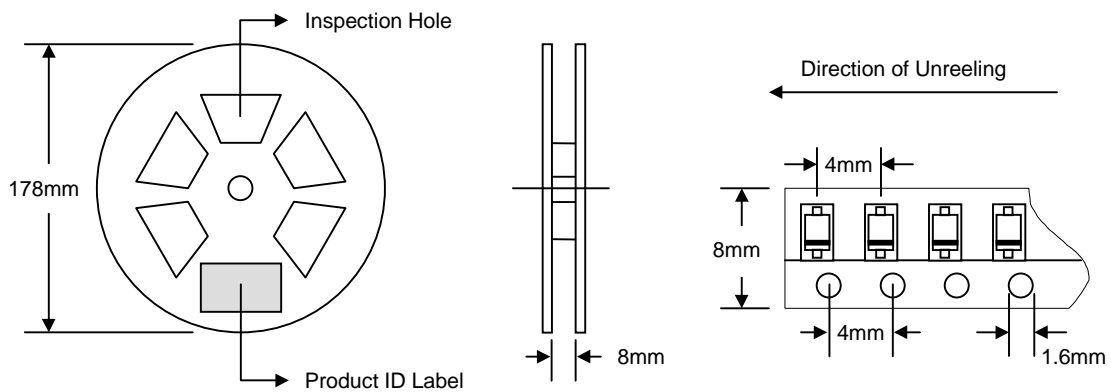
Cathode = Polarity Band
 Bxx = Device Code
 xx = 02 (SS0520FL)
 03 (SS0530FL)
 04 (SS0540FL)

RECOMMENDED FOOTPRINT



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.

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.**

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

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.

Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

Phone: 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417

Email: sales@wontop.com

Internet: <http://www.wontop.com>

We power your everyday.