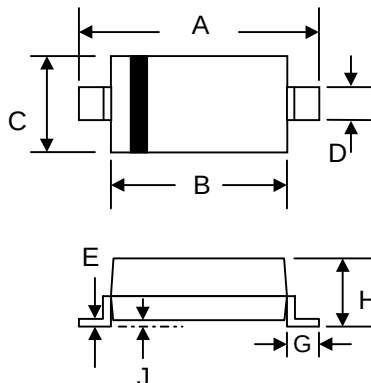


Features

- 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-123		
Dim	Min	Max
A	3.6	3.9
B	2.5	2.8
C	1.4	1.8
D	0.5	0.7
E	—	0.2
G	0.4	—
H	0.95	1.35
J	—	0.12
All Dimensions in mm		

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

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	SS0520	SS0530	SS0540	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
Power Dissipation (Note 1)	P _d	410			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	244			°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	SS0520	SS0530	SS0540	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.

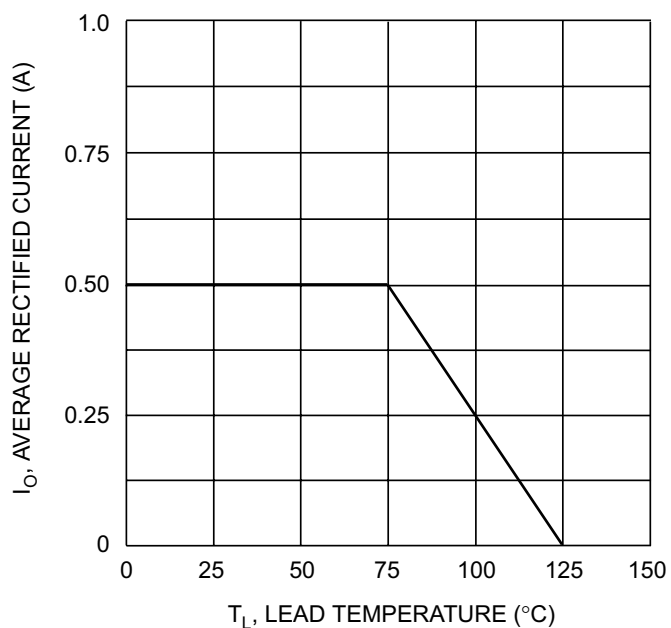


Fig. 1 Forward Current Derating Curve

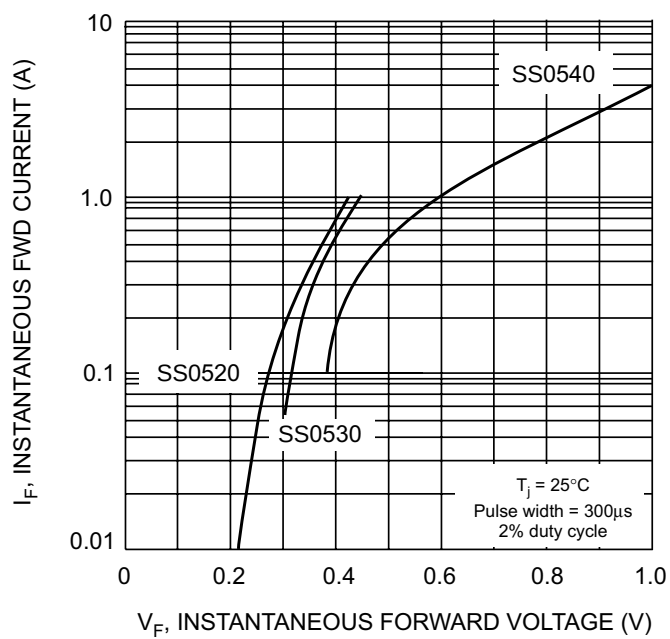


Fig. 2 Typical Forward Characteristics

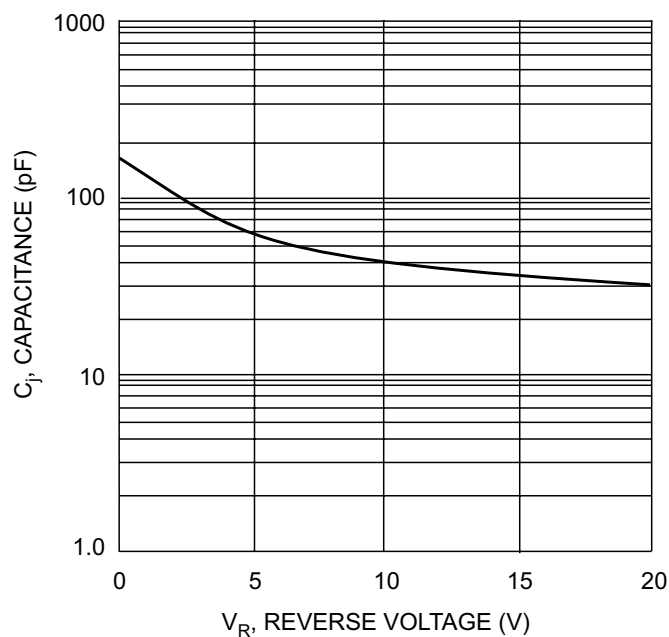


Fig. 3 Typ. Junction Capacitance vs Reverse Voltage

ORDERING INFORMATION

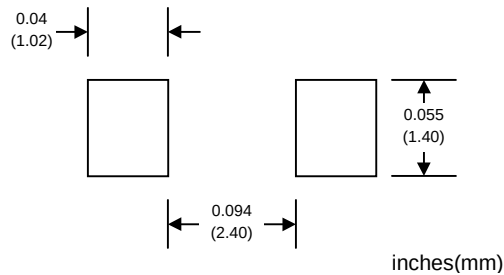
Product No.♦	Package Type	Shipping Quantity
SS0520-T1	SOD-123	3000/Tape & Reel
SS0520-T3	SOD-123	10000/Tape & Reel
SS0530-T1	SOD-123	3000/Tape & Reel
SS0530-T3	SOD-123	10000/Tape & Reel
SS0540-T1	SOD-123	3000/Tape & Reel
SS0540-T3	SOD-123	10000/Tape & Reel

Products listed in **bold** are WTE Preferred devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT



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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.

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>

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