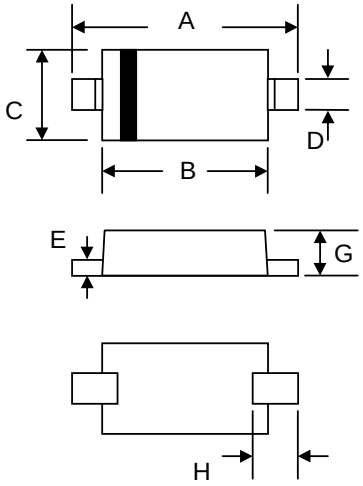
SD103AWS – SD103CWS

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-323		
Dim	**Min**	**Max**
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—
All Dimensions in mm		

Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: SD103AWS S6
  SD103BWS S7
  SD103CWS S8

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	30	20	V
Forward Continuous Current (Note 1)	I_F	350			mA
Non-Repetitive Peak Forward Surge Current @ t < 1.0s	I_{FSM}	2.0			A
Power Dissipation (Note 1)	P_d	200			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625			°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +125			°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic		Symbol	All Types	Unit	Test Condition
Reverse Breakdown Voltage	SD103AWS SD103BWS SD103CWS	$V_{(BR)R}$	40 30 20	V	@ I_R = 10µA, t_p < 300µS
Forward Voltage Drop		V_{FM}	0.37 0.60	V	@ I_F = 20mA @ I_F = 200mA
Peak Reverse Leakage Current		I_{RM}	5.0	µA	@ Rated DC Blocking Voltage
Typical Junction Capacitance		C_j	50	pF	V_R = 0V, f = 1.0MHz
Typical Reverse Recovery Time		t_{rr}	10	nS	I_F = I_R = 200mA I_{RR} = 0.1 x I_R, R_L = 100Ω

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

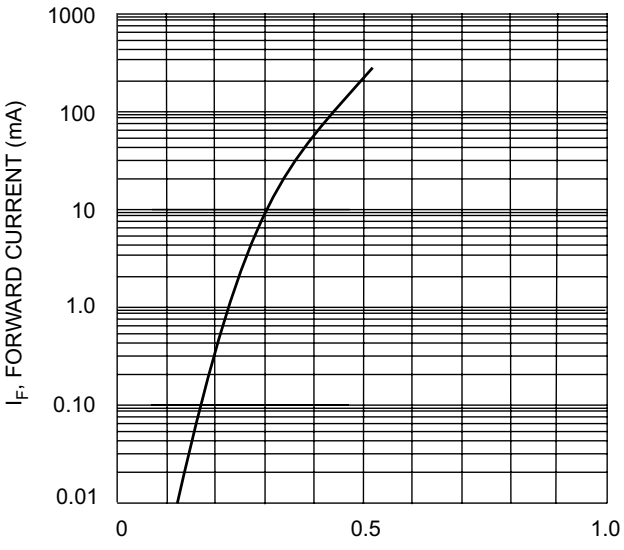


Fig. 1 Typical Forward Characteristics

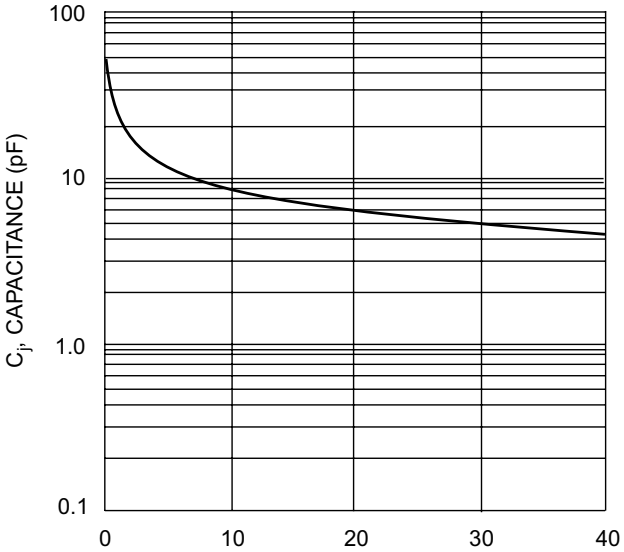


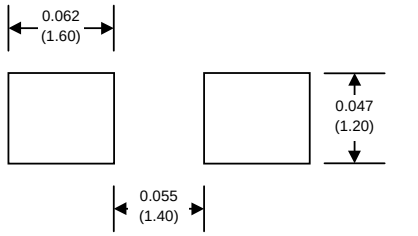
Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity
SD103AWS-T1	SOD-323	3000/Tape & Reel
SD103AWS-T3	SOD-323	10000/Tape & Reel
SD103BWS-T1	SOD-323	3000/Tape & Reel
SD103BWS-T3	SOD-323	10000/Tape & Reel
SD103CWS-T1	SOD-323	3000/Tape & Reel
SD103CWS-T3	SOD-323	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



inches(mm)

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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