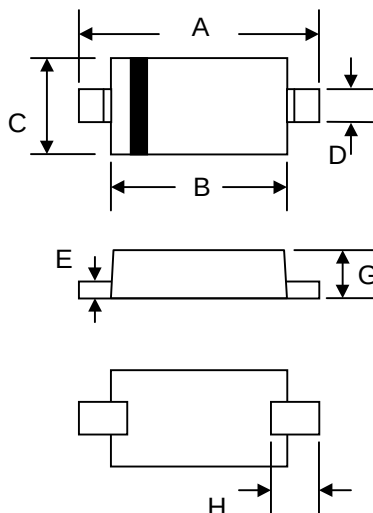


SD103AWS – SD103CWS

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 _{θJA}	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.

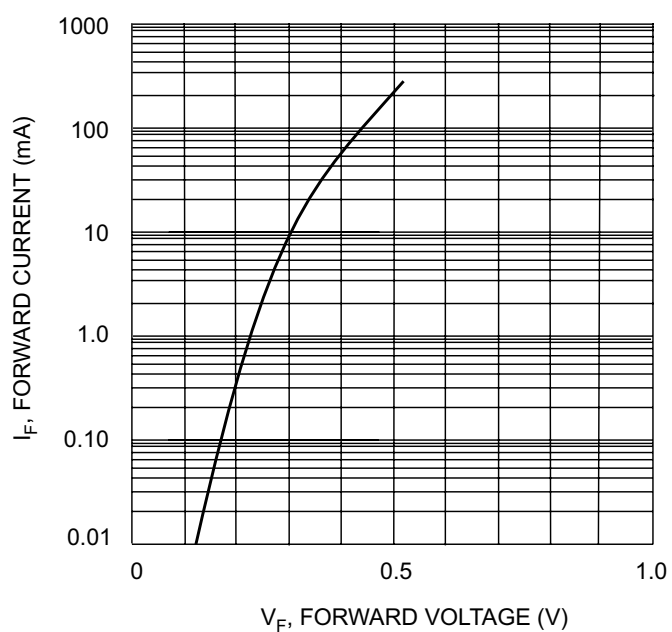


Fig. 1 Typical Forward Characteristics

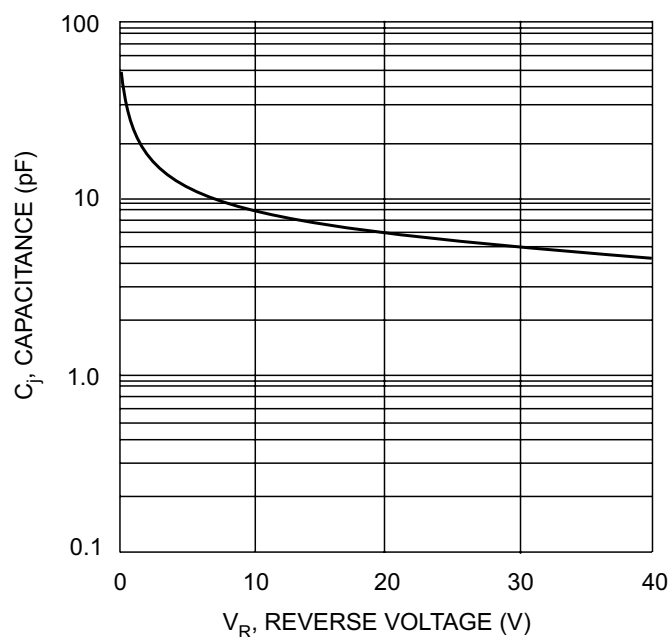


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

ORDERING INFORMATION

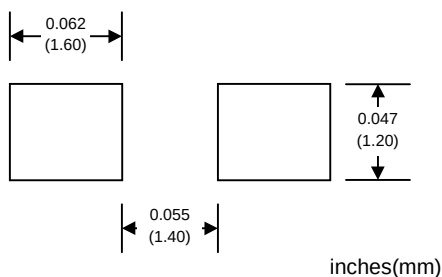
Product No.♦	Package Type	Shipping Quantity
SD103AWS-T1	SOD-323	3000/Tape & Reel
SD103AWS-T3	SOD-323	10000/Tape & Reel
SD103BWS-T1	SOD-323	3000/Tape & Reel
SD103BWS-T3	SOD-323	10000/Tape & Reel
SD103CWS-T1	SOD-323	3000/Tape & Reel
SD103CWS-T3	SOD-323	10000/Tape & Reel

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



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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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We power your everyday.