



WILLAS



SOD-323 Plastic-Encapsulate Diodes

SD103xWS

SCHOTTKY BARRIER DIODE

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- Moisture Sensitivity Level 1
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Polarity: Color band denotes cathode end

MARKING: SD103AWS: S4
SD103BWS: S5
SD103CWS: S6



Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak Reverse Voltage	V _{RRM}				
Working Peak Reverse Voltage	V _{RWM}	40	30	20	V
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{R(RMS)}	28	21	14	V
Forward Continuous Current	I _{FM}	350			mA
Repetitive Peak Forward Current @t≤1.0s	I _{FRM}	1.5			A
Power Dissipation	P _d	200			mW
Thermal Resistance Junction to Ambient	R _{θJA}	500			°C/W
Operating Temperature	T _j	-55~+125			°C
Storage Temperature	T _{STG}	-55~+150			°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}				V	
SD103AWS		40				I _R =100μA
SD103BWS		30				I _R =100μA
SD103CWS		20				I _R =100μA
Forward voltage	V _F			0.37 0.60	V	I _F =20mA I _F =200mA
Reverse current	I _{RM}			5.0	μA	
SD103AWS						V _R =30V
SD103BWS						V _R =20V
SD103CWS						V _R =10V
Capacitance between terminals	C _T			50	pF	V _R =0V, f=1.0MHz
Reverse Recovery Time	t _{rr}		10		ns	I _F =I _R =200mA I _{rr} =0.1X I _R , R _L =100Ω



WILLAS



SOD-323 Plastic-Encapsulate Diodes

SD103xWS

Typical Characteristics

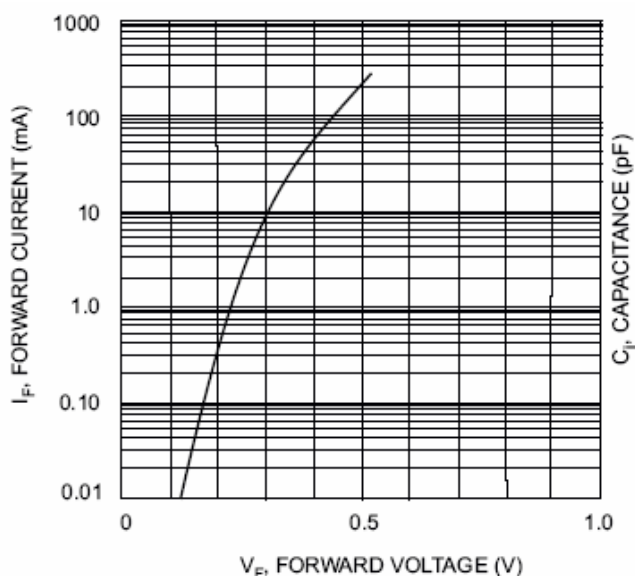


Fig. 1 Typical Forward Characteristics

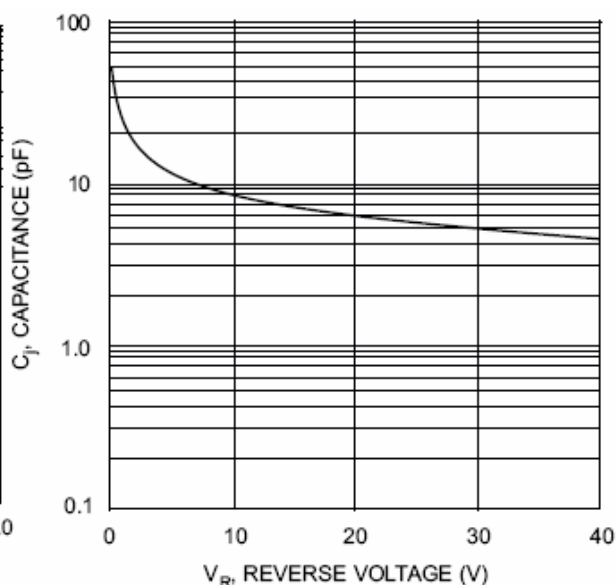
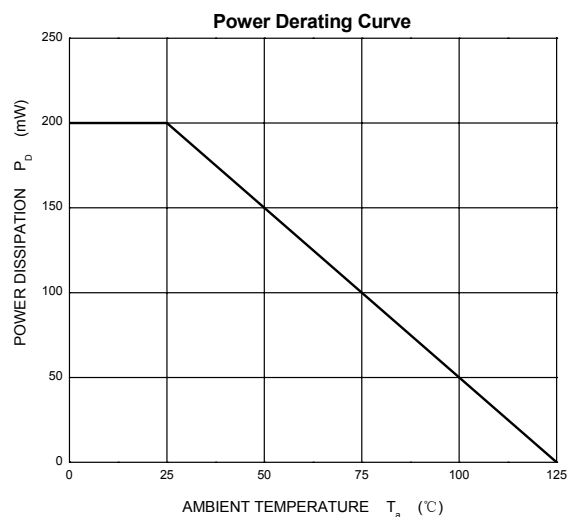
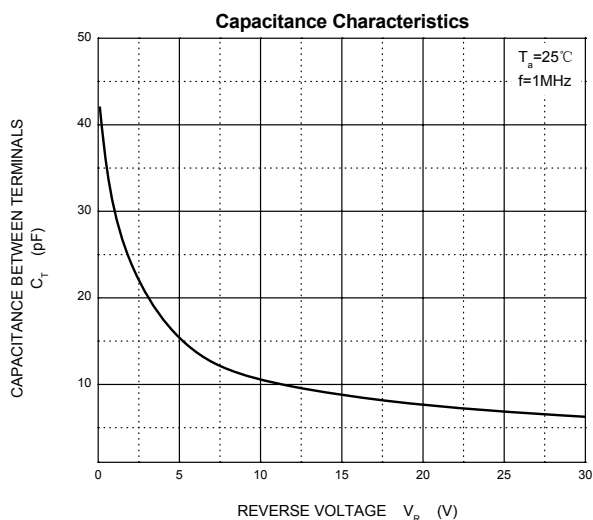
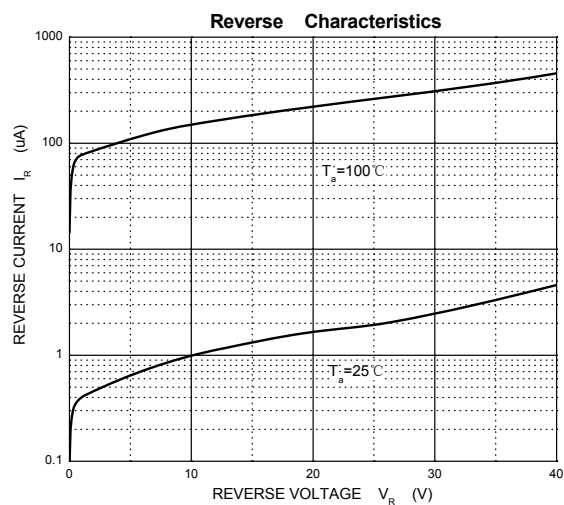
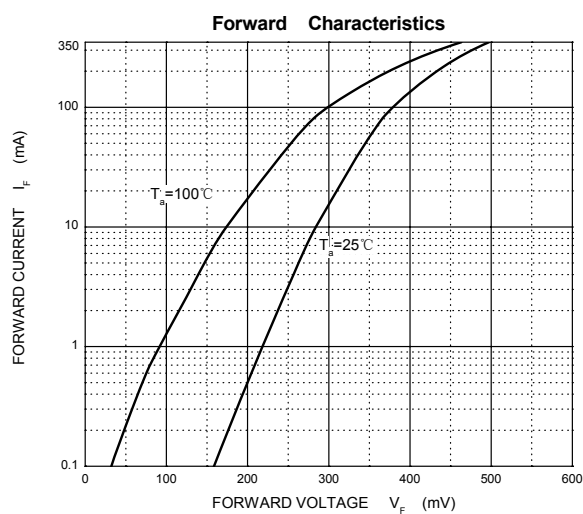


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

SD103AWS





WILLAS

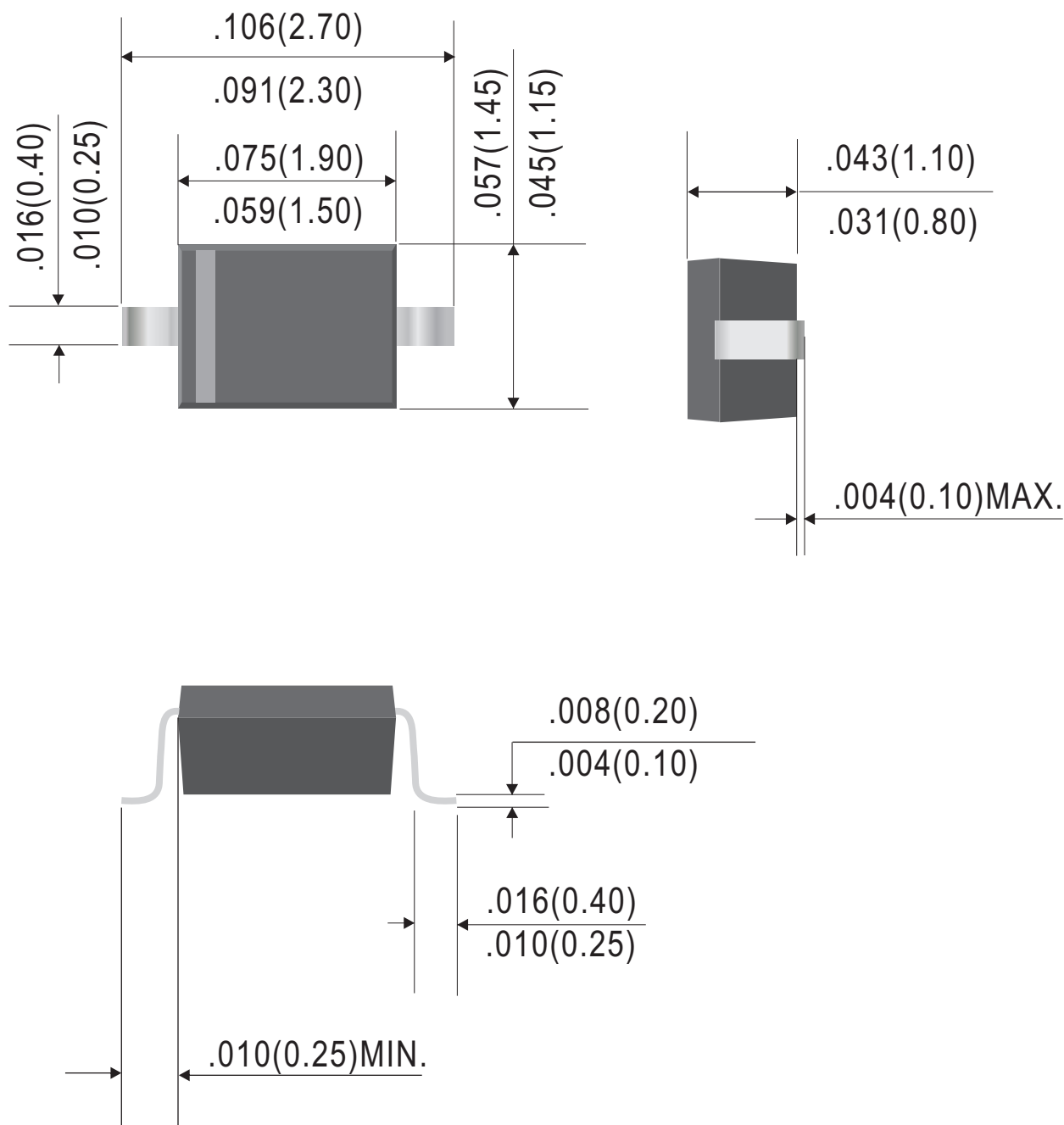


SOD-323 Plastic-Encapsulate Diodes

SD103xWS

Outline Drawing

SOD-323



Dimensions in inches and (millimeters)

Rev.C

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

*****Disclaimer*****

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.