WEITRON

SD103AWS/SD103BWS
SD103CWS

Surface Mount Schottky Barrier Diodes

Lead(Pb)-Free

SMALL SIGNAL
SCHOTTKY DIODES
350 mAMPERES
20-40 VOLTS

Features:

*Low Forward Voltage
*Very Small Conduction Losses
*Schottky Barrier Diodes Encapsulated in a SOD-323 Package

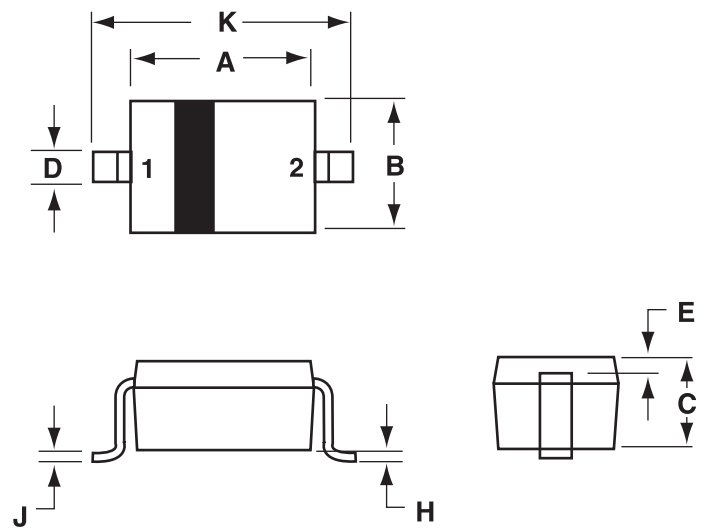
Mechanical Data:

*Polarity: Cathode Band
*Leads: Solderable per MIL-STD-202 Method 208
*Wight: 0.004grams(approx)

SOD-323

SOD-323 Outline Demensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15 REF	
H	0.00	0.10
J	0.089	0.377
K	2.30	2.70

PIN 1.CATHODE
2.ANODE

Maximum Ratings (T_A=25°C Unless otherwise noted)

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
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Average Rectified Output Current	I_{FAV}	350			mA
Non-Repetitive Peak Forward Surge Current @t≦1.0S	I_{FSM}	1.5			A
Power Dissipation (1)	P_D	200			mW
Typical thermal Resistance junction to Ambient Note (1)	$R_{\theta JA}$	625			°C/W
Operating & Storage Temperature Range	T_J T_{STG}	-55 to +125			°C

Electrical Characteristics (T_A=25°C Unless otherwise noted)

Characteristic		Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage (2) (I_R=100μA)	SD103AWS SD103BWS SD103CWS	$V_{(BR)R}$	40 30 20	- - -	- - -	V
Forward Voltage Note(2) I_F=20mA I_F=200mA		V_F	- -	- -	0.37 0.60	V
Reverse Current Note(2)	V_R=30V, SD103AWS V_R=20V,SD103BWS V_R=10V, SD103CWS	I_R	-	-	5.0	μA
Junction Capacitance, f=1MHZ, V_R=0VDC		Cj		50		PF
Reverse Recovery Time	I_F=I_F=200mA, I_{rr}=0.1*I_R,R_L=100Ω	t_{rr}		10		ns

Device Marking

Item	Marking		Eqivalent Circuit diagram
SD103AWS	S4	S4	
SD103BWS	S5		
SD103CWS	S6		

Note: 1. Valid provited that leads are kept at ambient tememperature.

2. Pulse Test : Pulse width = 300μs, Duty Cycle≤2%

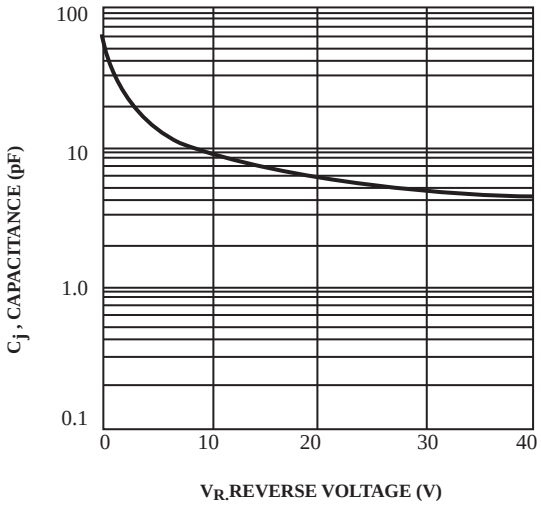
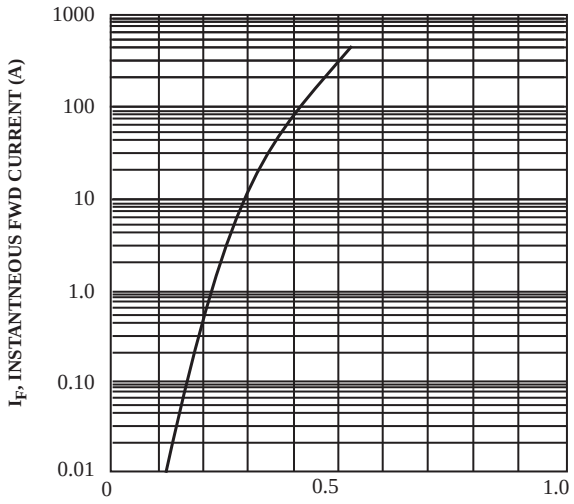


FIG. 2 Typ, Junction Capacitance vs. Reverse Voltage



FIG, 2 Typical Forward Characterictics