



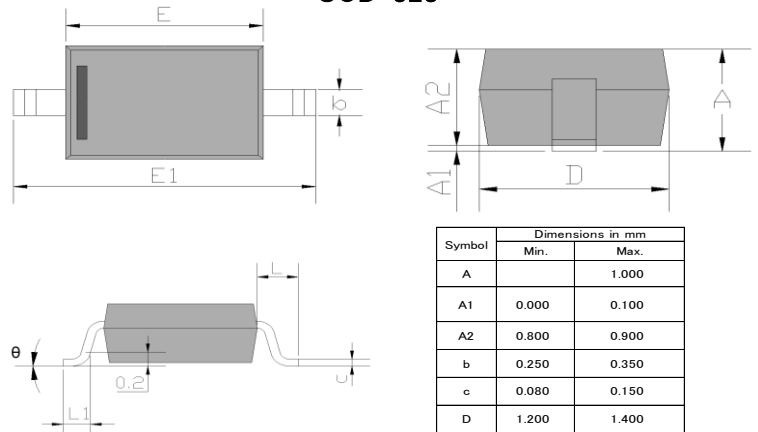
SD103AWS/SD103BWS/SD103CWS

Schottky Diode

SOD-323

Features

Low Power Loss For High Efficiency
Low Forward Voltage Schottky Rectifier
SOD323 Micro SMD Package
Rohs Compliant / Green EMC
Matte Tin (Sn) Lead Finish
Cathode Band / Device Marking



Symbol	Dimensions in mm	
	Min.	Max.
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475 REF.	
L1	0.250	0.400
θ	0°	8°

Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	SD103AWS	SD103BWS	SD103CWS	Units
V_{RM}	Non-Repetitive Peak Reverse Voltage	40	30	20	V
V_{RRM}	Repetitive Peak Reverse Voltage	40	30	20	V
$V_{R(RMS)}$	RMS Reverse Voltage	28	21	14	V
I_O	Average Rectified Output Current	350			mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current (@t=8.3ms)	2			A
P_D	Power Dissipation	200			mW
T_J	Junction Temperature	125			°C
T_{STG}	Storage Temperature	-55 to +125			°C

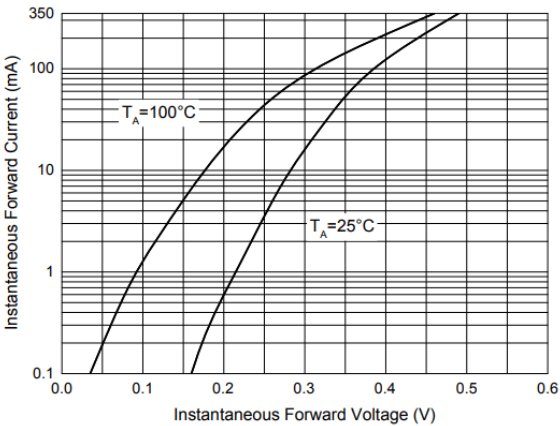
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test Conditions		Min	Typ	Max	Units
V_{BR}	Reverse breakdown Voltage	$I_R=100\mu A$	SD103AWS	40			V
		$I_R=100\mu A$	SD103BWS	30			
		$I_R=100\mu A$	SD103CWS	20			
V_F	Forward Voltage	$I_F=20mA$				0.37	V
		$I_F=200mA$				0.6	
I_R	Reverse current	$V_R=30V$	SD103AWS			5.0	μA
		$V_R=20V$	SD103BWS			5.0	
		$V_R=10V$	SD103CWS			5.0	

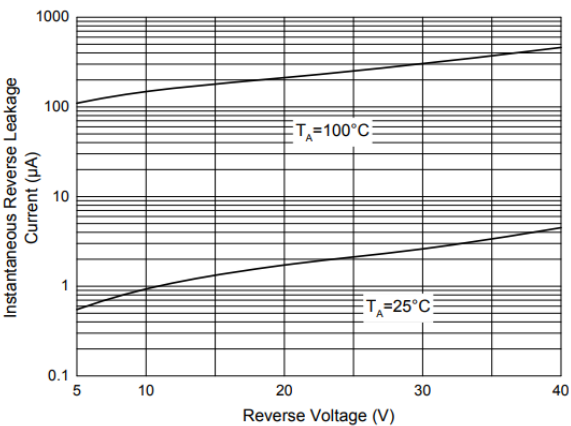
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
Ctot	Total capacitance	VR=0V,f=1MHz			50	pF
trr	Reverse recovery time	IF= IR =200mA, Irr=0.1*IR , RL=100Ω		10		ns

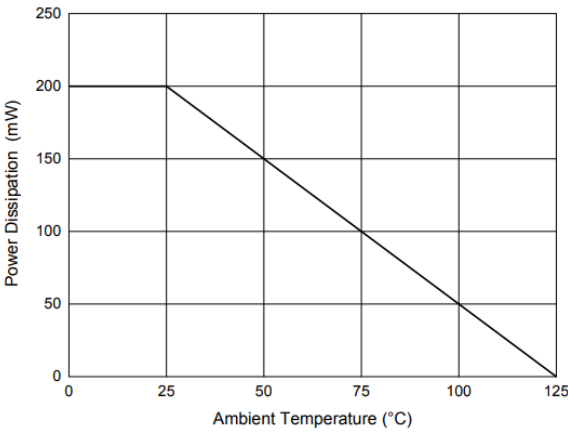
Typical Characteristics



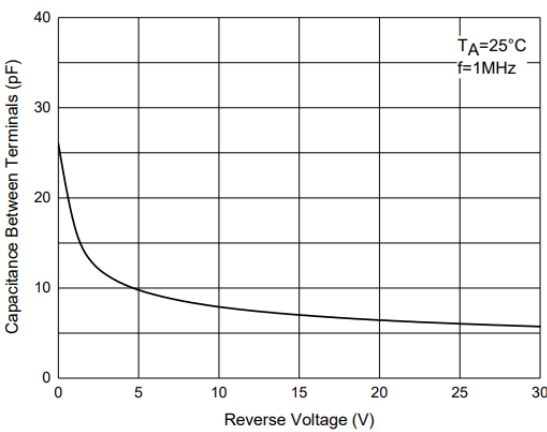
Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



Power Derating Curve



Capacitance Characteristics