



# THE DATASHEET OF SD103AWS-TP





Micro Commercial Components

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## Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Guard Ring Construction for Transient Protection
- Negligible Reverse recovery time
- Low Reverse Capacitance and Low Forward Voltage Drop
- Marking : SD103AWS: S4 ,SD103BWS: S5 , SD103CWS: S6
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

## Maximum Ratings

- Operating Temperature: -65°C to +125°C
- Storage Temperature: -65°C to +125°C
- Maximum Thermal Resistance; 300°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD103AWS	40V	28V	40V
SD103BWS	30V	21V	30V
SD103CWS	20V	14V	20V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

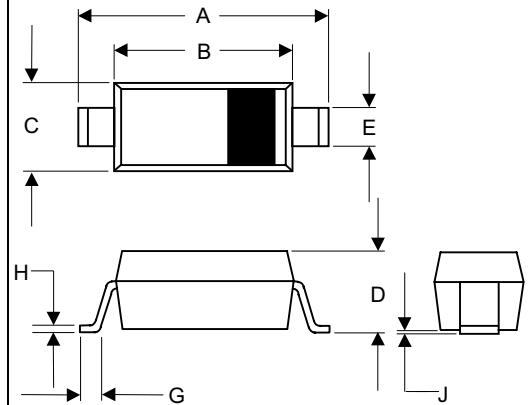
Average Forward Current	$I_{F(AV)}$	350mA	Note 1
Peak Forward Surge Current	$I_{FSM}$	1.5A	$t \leq 1.0s$
Maximum Power Dissipation	$P_D$	200mW	Note 1
Maximum Instantaneous Forward Voltage	$V_F$	0.37V 0.60V	$I_{FM} = 20mA$ $I_{FM} = 200mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0µA	$V_R = 30V$ (AWS) $V_R = 20V$ (BWS) $V_R = 10V$ (CWS)
Typical Junction Capacitance	$C_j$	50pF	Measured at 1.0MHz, $V_R=0V$
Typical Reverse Recovery Time	$t_{rr}$	10ns	$I_F = I_R = 200mA$ $I_{rr} = 0.1 \times I_R$ $R_L = 100\Omega$

Note: 1. Valid provided that electrodes are kept at ambient Temperature

# SD103AWS THRU SD103CWS

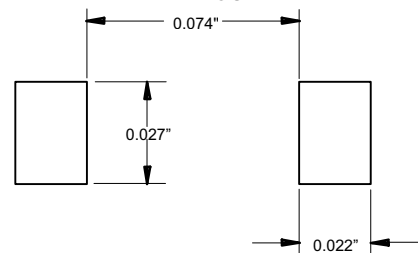
## 400mW Small Signal Schottky Diode 20 to 40 Volts

### SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	----	.006	----	0.15	

#### SUGGESTED SOLDER PAD LAYOUT



# SD103AWS thru SD103CWS

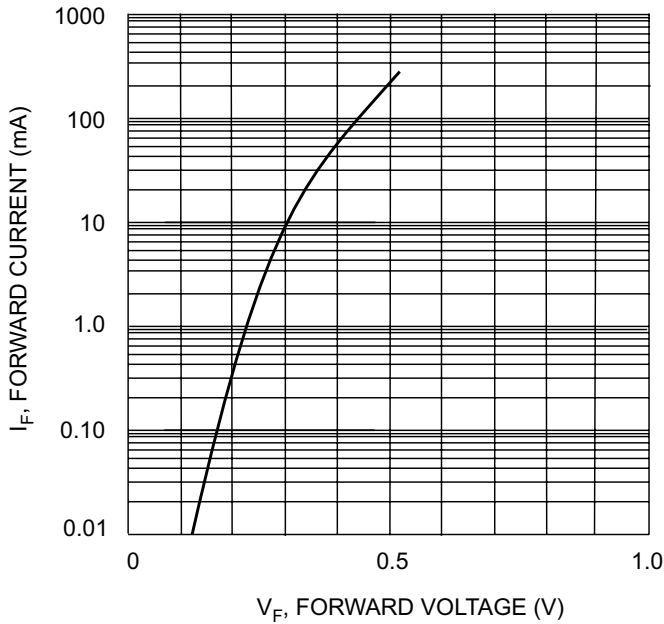


Fig. 1 Typical Forward Characteristics

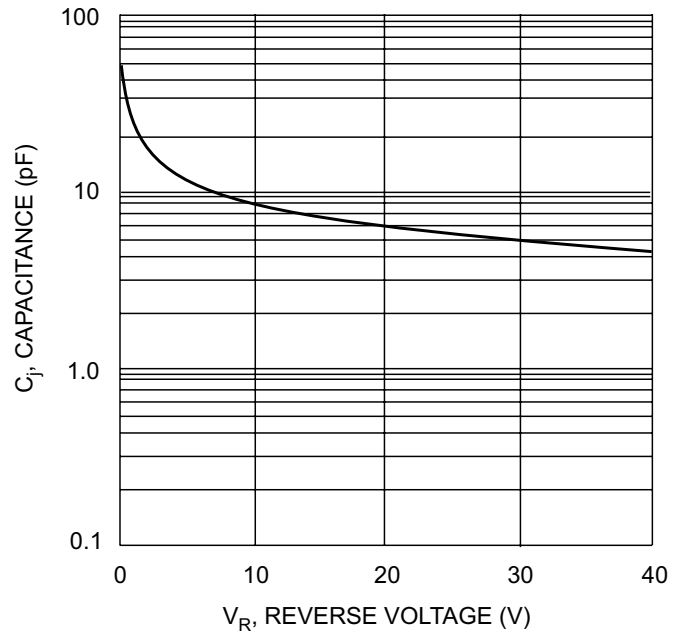


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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