

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

# SD103AWS THRU SD103CWS

## **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

## **Maximum Ratings**

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

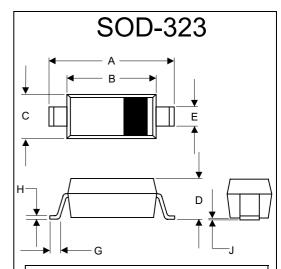
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD103AWS	40V	28V	40V
SD103BWS	30V	21V	30V
SD103CWS	20V	14V	20V

## Electrical Characteristics @ $25^{\circ}$ C Unless Otherwise Specified

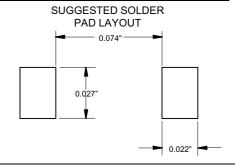
Average Forward Current	I <sub>F(AV)</sub>	350mA	Note 1
Peak Forward Surge Current	I <sub>FSM</sub>	1.5A	t≦1.0s
Maximum Power Dissipation	$P_{D}$	200mW	Note 1
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.37V 0.60V	I <sub>FM</sub> = 20mA I <sub>FM</sub> = 200mA
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0µA	V <sub>R</sub> = 30V (AWS) V <sub>R</sub> = 20V (BWS) V <sub>R</sub> = 10V (CWS)
Typical Junction Capacitance	C <sub>j</sub>	50pF	Measured at 1.0MHz, V <sub>R</sub> =0V
Typical Reverse Recovery Time	t <sub>rr</sub>	10ns	$I_F = I_R = 200 \text{mA}$ $I_{rr} = 0.1 \times I_R R_L = 100 \Omega$

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

# 400mW Small Signal Schottky Diode 20 to 40 Volts

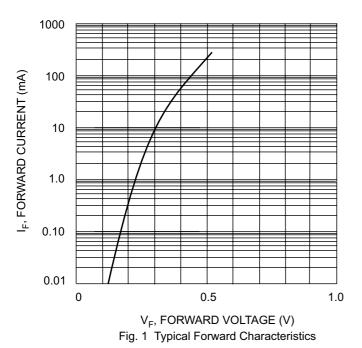


DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX		
Α	.090	.107	2.30	2.70		
В	.063	.071	1.60	1.80		
С	.045	.053	1.15	1.35		
D	.031	.045	0.80	1.15		
Е	.010	.016	0.25	0.40		
G	.004	.018	0.10	0.45		
Н	.004	.010	0.10	0.25		
J		.006		0.15		



## SD103AWS thru SD103CWS





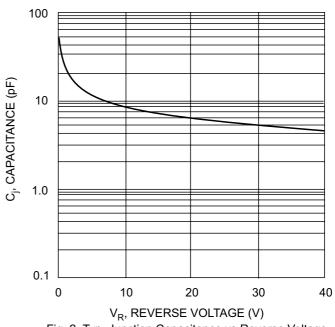


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage



#### **Micro Commercial Components**

### Ordering Information:

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

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.