

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

## **Features**

- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
  Low Reverse Recovery Time
- Low Reverse Capacitance
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection

## **Mechanical Data**

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by Cathode Band
- Marking : SD101AWS---S1 ; SD101BWS---S2; SD101CWS---S3

### Maximum Ratings @ 25°C Unless Otherwise Specified

Characteristic	Symbol	SD101AWS	SD101BWS	SD101CWS
Peak Repetitive Reverse Voltage VRRM				
Working Peak Reverse Voltage	Vrwm	60V	50V	40V
DC Blocking Voltage	V <sub>R</sub>			
RMS Reverse Voltage	V <sub>R(RMS)</sub>	42V	35V	28V
Maximum sigle cycle surge 10us square wave	Ігѕм	2.0A		
Power Dissipation(Note 1)	Pd	400mW		
Thermal Resistance, Junction to Ambient	R	650° C/W		
Operating Junction Temp. Range	Tj	-55 to +125°C		
Storage Temp. Range	Тѕтс	-55 to +150°C		

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Charateristic		Symbol	Max	Test Condition
Leakage Current	SD101AWS		200nA	V <sub>R</sub> =50V
-	SD101BWS	Ir	200nA	V <sub>R</sub> =40V
	SD101CWS		200nA	V <sub>R</sub> =30V
Maximum Forward	SD101AWS		0.41V	
Voltage Drop	SD101BWS		0.4V	
	SD101CWS	Ve	.39V	I <sub>F</sub> =1mA
	SD101AWS	VF	1V	I <sub>F</sub> =15mA
	SD101BWS		0.95V	
	SD101CWS		0.9V	
Junction Cap.	SD101AWS		2.0pF	
	SD101BWS	Cj	2.1pF	V <sub>R</sub> =0V, f=1.0MHz
	SD101CWS		2.2pF	
Reverse Recovery Time		t <sub>rr</sub>	1ns	IF=IR=5mA, recover
				to 0.1IR

Note: 1

Valid provided that electrodes are kept at ambient temperature

# SD101AWS THRU SD101CWS

## Small Signal Schottky Diodes



DIMENSIONS						
DIM	INCHES		N	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		



www.mccsemi.com

## SD101AWS thru SD101CWS



#### **Micro Commercial Components**

Figure 1. Typical variation of forward. current vs.fwd. Voltage







Figure 2. Typical forward conduction curve



Figure 4. Typical capacitance curve as a function of reverse voltage



# www.mccsemi.com



### **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.

# www.mccsemi.com