

**Micro Commercial Components** 



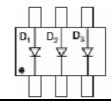
Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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

# SD103ATW

# **Features**

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current
- Three Fully Isolated Schottky Diodes Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: KLL



## **Maxim um Ratings**

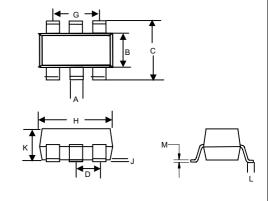
Symbol	Rating	Rating	Unit
$egin{array}{c} V_{RRM} \ V_{RWM} \ V_{R} \end{array}$	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	40	V
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I <sub>FM</sub>	Forward Continuous Current(note.1)	350	mA
Ιο	Average Rectified Output Current(note.1)	175	mA
I <sub>FSM</sub>	Peak Forward Surge Current @t<=10ms	1.0	А
R <sub>⊕JA</sub>	Thermal Resistance Junction to Ambient	500	°C/W
$P_D$	Power dissipation	200	mW
Τ <sub>J</sub>	Junction Temperature	125	$^{\circ}$ C
T <sub>STG</sub>	Storage Temperature	-55 to +125	$^{\circ}$

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

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	40V		I <sub>R</sub> =100 μ A(note.2)
I <sub>R</sub>	Reverse Voltage Leakage Current(note.2)		2 μ Α 5 μ Α	V <sub>R</sub> =10V V <sub>R</sub> =30V
V <sub>F</sub>	Forward Voltage(note.2)		0.27V 0.32V 0.37V 0.50V	$I_F=1.0$ mA $I_F=5.0$ mA $I_F=20$ mA $I_F=100$ mA
$C_T$	Total Capacitance		50pF	$V_R=0V$ , $f=1MHZ$
t <sub>rr</sub>	Reverse Recovery Time		10.0ns	$I_F=IR=200$ mA, $Irr=0.1*IR,RL=100$ $\Omega$

# 200mW **SCHOTTKY BARRIER** DIODE

## **SOT-363**



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.006	.014	0.15	0.35	
В	.045	.053	1.15	1.35	
С	.085	.096	2.15	2.45	
D	.026		0.65Nominal		
G	.047	.055	1.20	1.40	
Н	.071	.087	1.80	2.20	
J		.004		0.10	
K	.035	.043	0.90	1.10	
L	.010	.018	0.26	0.46	
M	.003	.006	0.08	0.15	

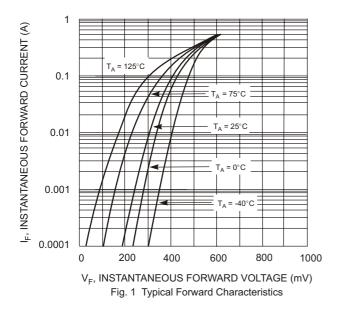
Notes: 1. This is the maximum rating of single Diode ( $D_1$  or  $D_2$  or  $D_3$ ). In the case of using two or three diodes, the maximum ratings per diode are 75% of the ratings for single diode operation.

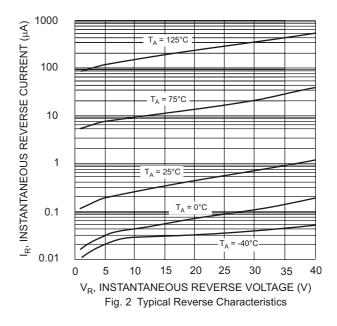
2. Short duration test pulse used to minimize self-heating effect.

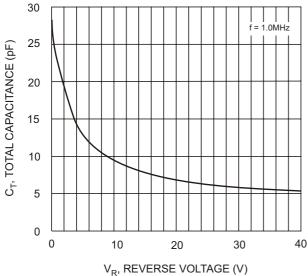
## SD103ATW



**Micro Commercial Components** 







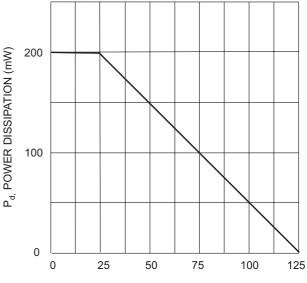


Fig. 3 Typ. Total Capacitance vs. Reverse Voltage

 $T_A$ , AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve



#### **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.