

**Micro Commercial Components** 



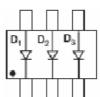
Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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# SD103ATW

# **Features**

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current
- Three Fully Isolated Schottky Diodes
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Marking: KLL
- Moisture Sensitivity Level 1



## **Maxim um Ratings**

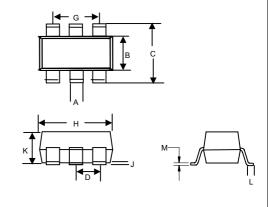
Symbol	Rating	Rating	Unit
$V_{RRM} \ V_{RWM}$	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage	40	V
$V_{RWM}$	DC Blocking Voltage	40	V
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I <sub>FM</sub>	Forward Continuous Current(note.1)	350	mA
Ιο	Average Rectified Output Current(note.1)	175	mA
I <sub>FSM</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
TJ	Junction Temperature	125	$^{\circ}\!\mathbb{C}$
T <sub>STG</sub>	Storage Temperature	-55 to +125	$^{\circ}\mathbb{C}$

### 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**



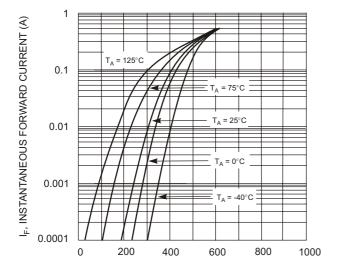
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.006	.014	0.15	0.35	
В	.045	.053	1.15	1.35	
С	.085	.096	2.15	2.45	
D	.026		0.65Nominal		
G	.047	.055	1.20	1.40	
Н	.071	.087	1.80	2.20	
J		.004		0.10	
K	.035	.043	0.90	1.10	
L	.010	.018	0.26	0.46	
M	.003	.006	0.08	0.15	

Notes: 1. This is the maximum rating of single Diode (D<sub>1</sub> or D<sub>2</sub> or D<sub>3</sub>). In the case of using two or three diodes, the maximum ratings per diode are 75% of the ratings for single diode operation.

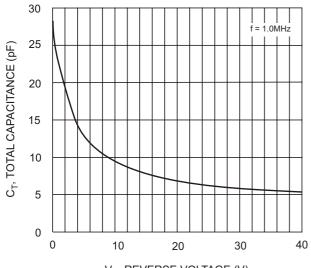
Short duration test pulse used to minimize self-heating effect.

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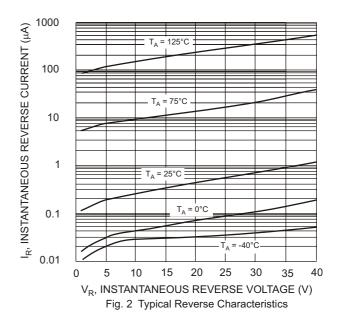


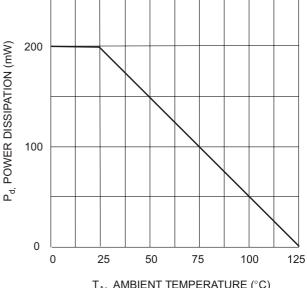


 $V_{\rm F}$ , INSTANTANEOUS FORWARD VOLTAGE (mV) Fig. 1 Typical Forward Characteristics



 $\label{eq:VR} {\rm V_R,\,REVERSE\,\,VOLTAGE\,\,(V)}$  Fig. 3 Typ. Total Capacitance vs. Reverse Voltage





T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve



#### **Micro Commercial Components**

## Ordering Information:

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

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