



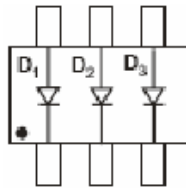
Micro Commercial Components

Micro Commercial Components  
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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
- Case Material: Molded Plastic. UL Flammability Classificatio Rating 94-0 and MSL Rating 1
- Marking: KLL



**200mW**  
**SCHOTTKY BARRIER**  
**DIODE**

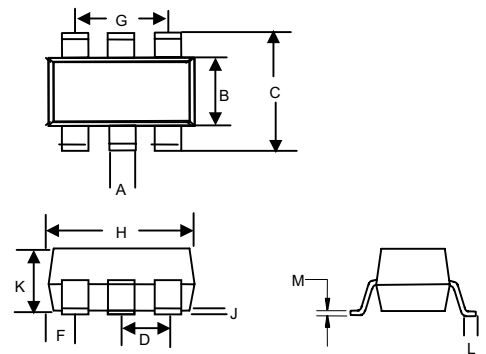
## Maxim um Ratings

Symbol	Rating	Rating	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	40	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_R$	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
$I_{FM}$	Forward Continuous Current(note.1)	350	mA
$I_O$	Average Rectified Output Current(note.1)	175	mA
$I_{FSM}$	Peak Forward Surge Current @ $t \leq 10ms$	1.0	A
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	500	$^{\circ}C/W$
$P_D$	Power dissipation	200	mW
$T_J$	Junction Temperature	125	$^{\circ}C$
$T_{STG}$	Storage Temperature	-55 to +125	$^{\circ}C$

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	40V	---	$I_R = 100 \mu A$ (note.2)
$I_R$	Reverse Voltage Leakage Current(note.2)	---	2 $\mu A$ 5 $\mu A$	$V_R = 10V$ $V_R = 30V$
$V_F$	Forward Voltage(note.2)	----	0.27V 0.32V 0.37V 0.50V	$I_F = 1.0mA$ $I_F = 5.0mA$ $I_F = 20mA$ $I_F = 100mA$
$C_T$	Total Capacitance	---	50pF	$V_R = 0V, f = 1MHz$
$t_{rr}$	Reverse Recovery Time	---	10.0ns	$I_F = I_R = 200mA,$ $I_{rr} = 0.1 * I_R, R_L = 100 \Omega$

## SOT-363



DIM	DIMENSIONS					NOTE
	INCHES		MM			
	MIN	MAX	MIN	MAX		
A	.004	.012	0.10	0.30		
B	.045	.053	1.15	1.35		
C	.079	.087	2.00	2.20		
D	.026		0.65Nominal			
F	.012	.016	0.30	0.40		
H	.071	.087	1.80	2.20		
J	---	.004	---	0.10		
K	.035	.039	0.90	1.00		
L	.010	.016	0.25	0.40		
M	.004	.016	0.10	0.25		

- 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.

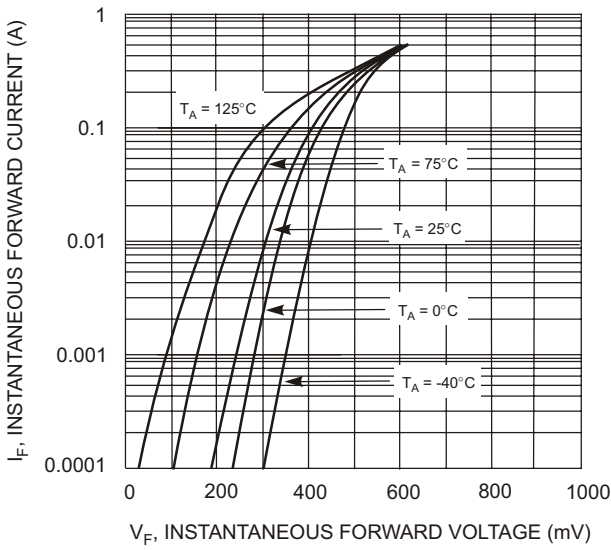


Fig. 1 Typical Forward Characteristics

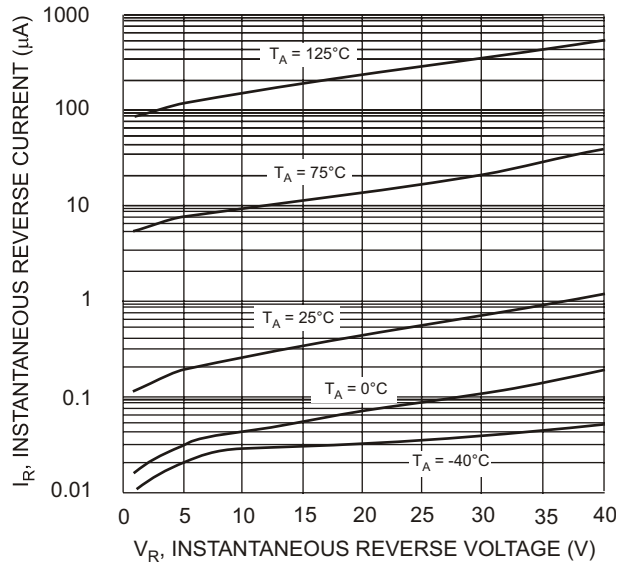


Fig. 2 Typical Reverse Characteristics

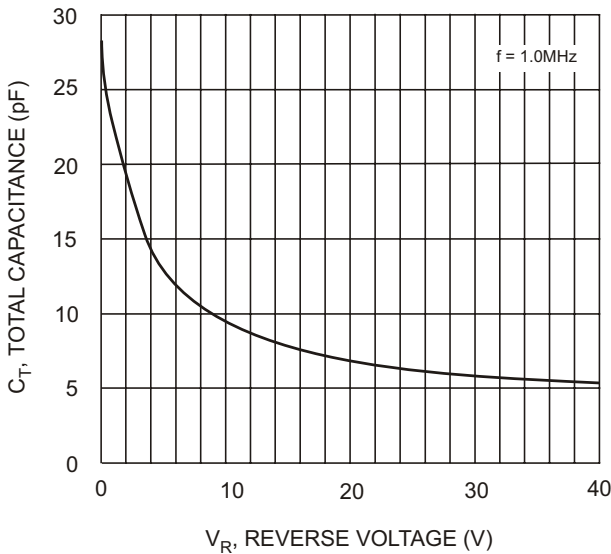


Fig. 3 Typ. Total Capacitance vs. Reverse Voltage

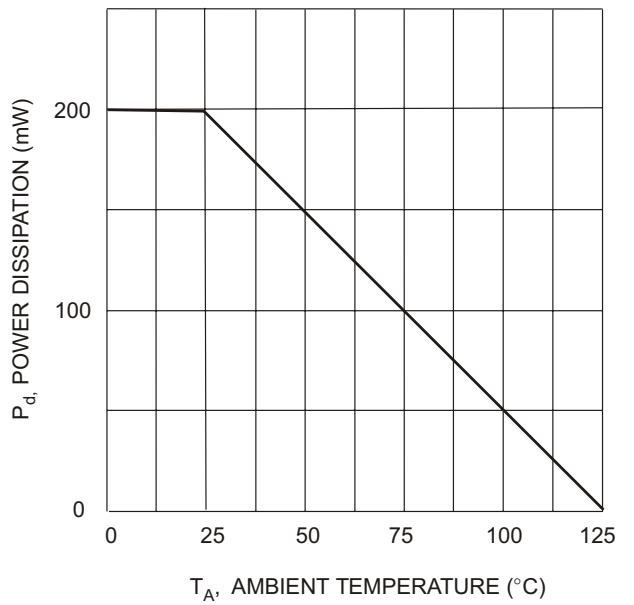


Fig. 4 Power Derating Curve



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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