



Micro Commercial Components

Micro Commercial Components  
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# SD101A THRU SD101C

## Small Signal Schottky Diodes

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Reverse Recovery Time
- Low Reverse Capacitance
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection

### Mechanical Data

- Case: DO-35, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Moisture Sensitivity: Level 1 per J-STD-020C

Maximum Ratings @ 25°C Unless Otherwise Specified

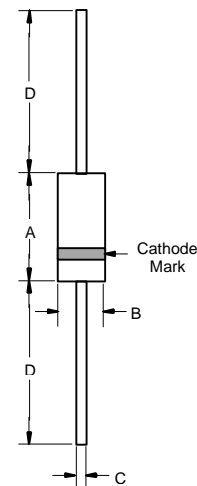
Characteristic	Symbol	SD101A	SD101B	SD101C
Peak Repetitive Reverse Voltage	$V_{RRM}$			
Working Peak Reverse Voltage	$V_{RWM}$	60V	50V	40V
DC Blocking Voltage	$V_R$			
RMS Reverse Voltage	$V_{R(RMS)}$	42V	35V	28V
Maximum single cycle surge 10us square wave	$I_{FSM}$	2.0A		
Power Dissipation(Note 2)	$P_d$	400mW		
Thermal Resistance, Junction to Ambient	$R$	300K/W		
Junction Temperature	$T_j$	125°C		
Operation/Storage Temp. Range	$T_{STG}$	-55 to +150°C		

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Max	Test Condition
Leakage Current	$I_R$	200nA	$V_R=50V$
		200nA	$V_R=40V$
		200nA	$V_R=30V$
Maximum Forward Voltage Drop	$V_F$	0.41V	$I_F=1mA$
		0.4V	$I_F=15mA$
		0.39V	
		1V	
		0.95V	
		0.9V	
Junction Cap.	$C_j$	2.0pF	$V_R=0V, f=1.0MHz$
		2.1pF	
		2.2pF	
Reverse Recovery Time	$t_{rr}$	1ns	$I_F=I_R=50mA$ , recover to 200mA/0.1I <sub>R</sub>

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.  
2. Valid provided that electrodes are kept at ambient temperature

### DO-35



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

# SD101A thru SD101C

Figure 1. Typical variation of forward current vs. fwd. Voltage for primary conduction through the schottky barrier

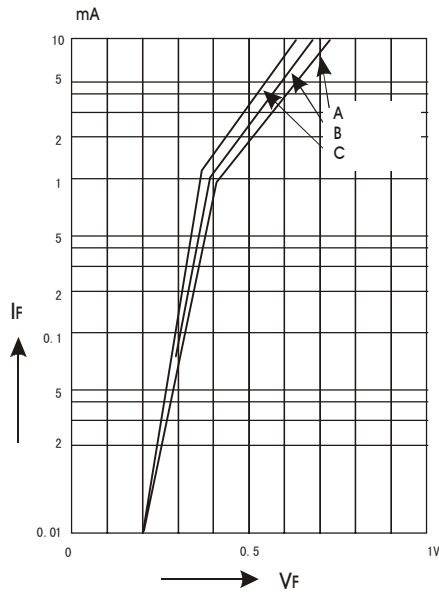


Figure 2. Typical forward conduction curve of combination Schottky barrier and PN junction guard ring

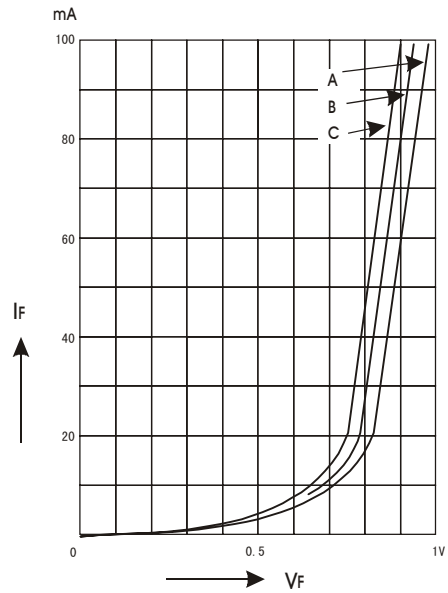


Figure 3. Typical variation of reverse current at versus temperature

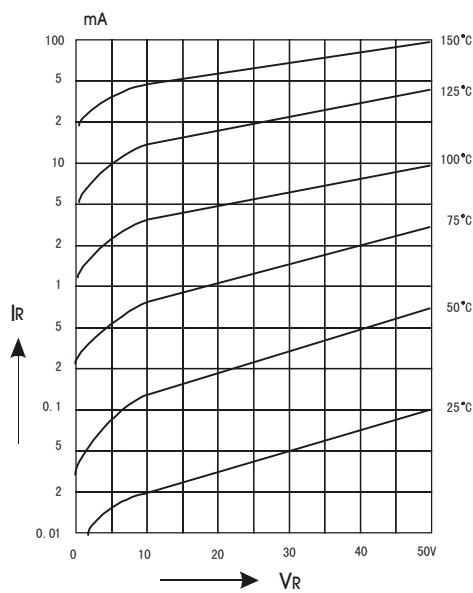
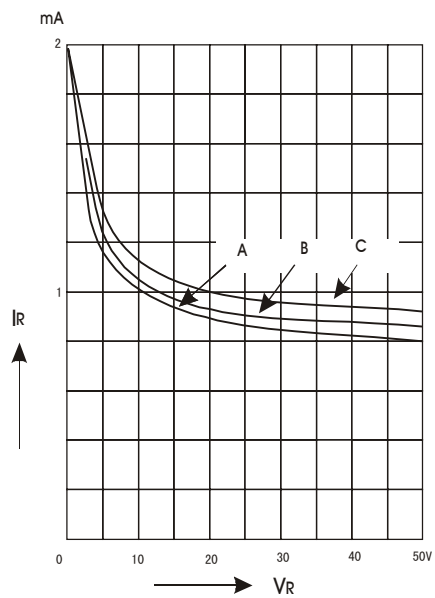


Figure 4. Typical capacitance curve as a function of reverse voltage





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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 10Kpcs/Reel
(Part Number)-AP	Ammo Packing;5Kpcs/AmmoBox
(Part Number)-BP	Bulk;500pcs/Bag

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