Micro Commercial Components
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SD101A THRU SD101C

Small Signal Schottky Diodes

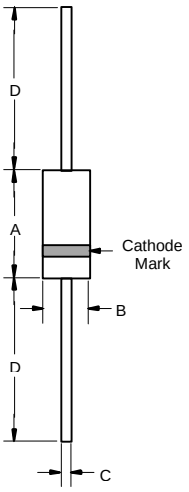
Features

- 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

DO-35



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

Maximum Ratings @ 25°C Unless Otherwise Specified

Characteristic	Symbol	SD101A	SD101B	SD101C
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60V	50V	40V
RMS Reverse Voltage	$V_{R(RMS)}$	42V	35V	28V
Maximum sigle cycle surge 10us square wave	I_{FSM}	2.0A		
Power Dissipation(Note 1)	P_d	400mW		
Thermal Resistance, Junction to Ambient	R	300K/W		
Junction Tmperature	T_j	125°C		
Operation/Storage Temp. Range	T_{STG}	-55 to +150°C		

Electrical Characteristics @ 25°C Unless Otherwise Specified

Charateristic		Symbol	Max	Test Condition
Leakage Current	SD101A	I_R	200nA	V_R=50V
	SD101B		200nA	V_R=40V
	SD101C		200nA	V_R=30V
Maximum Forward Voltage Drop	SD101A	V_F	0.41V	I_F=1mA
	SD101B		0.4V	
	SD101C		0.39V	
	SD101A		1V	I_F=15mA
	SD101B		0.95V	
	SD101C		0.9V	
Junction Cap.	SD101A	C_j	2.0pF	V_R=0V, f=1.0MHz
	SD101B		2.1pF	
	SD101C		2.2pF	
Reverse Recovery Time		t_{rr}	1ns	I_F=I_R=50mA, recover to 200mA/0.1I_R

Note: 1. Valid provided that electrodes are kept at ambient temperature

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

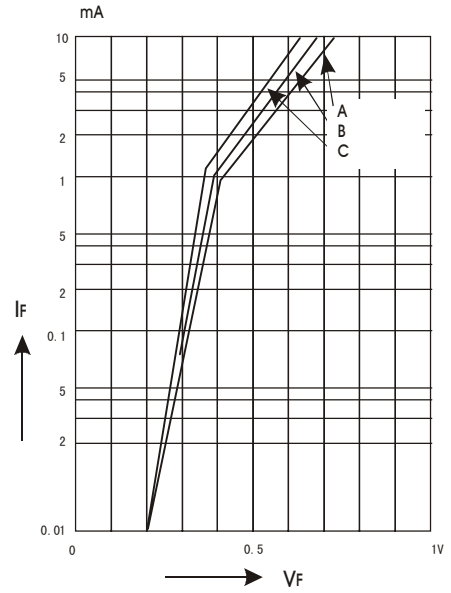


Figure 2. Typical forward conduction curve of combination Schottky barrier and PN junction guard ring

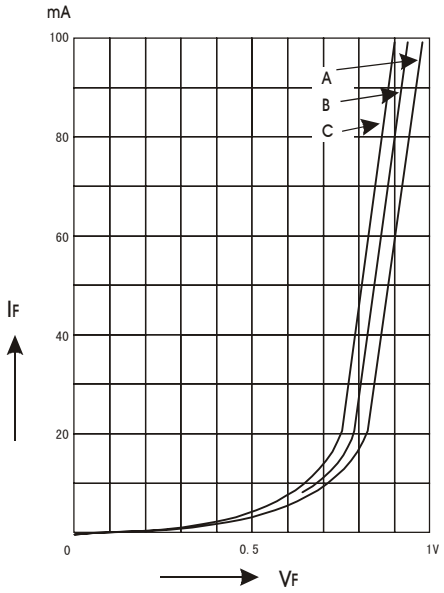


Figure 3.Typical variation of reverse current at versus temperature

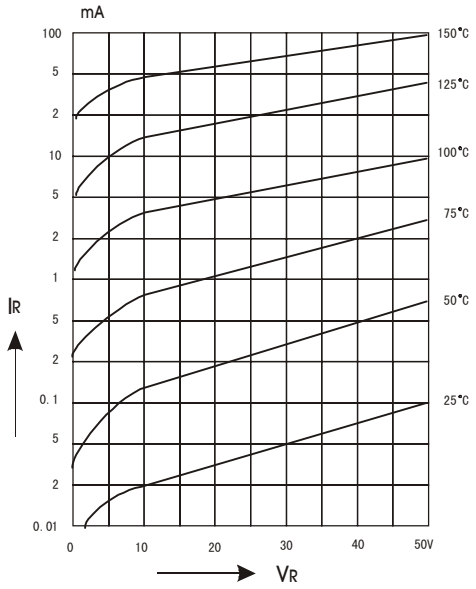


Figure 4. Typical capacitance curve as a function of reverse voltage