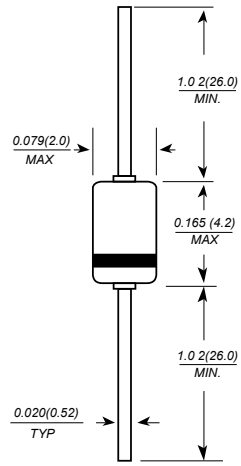
SD101A - SD101C

SCHOTTKY BARRIER RECTIFIER DIODES

DO-35(GLASS)



Dimensions in millimeters

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance

Mechanical Data

- Case: DO-35, Plastic
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Polarity: Cathode Band
- Weight: 0.13 grams (approx.)

RoHS COMPLIANT

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	SD101A	SD101B	SD101C	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60	50	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	35	28	V
Forward Continuous Current (Note 1)	I_{FM}	15			mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 10μs	I_{FSM}	50 2.0			mA A
Power Dissipation (Note 1)	P_d	400			mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	375			K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175			°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic		Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage Drop	SD101A SD101B SD101C SD101A SD101B SD101C	V_{FM}	—	0.41 0.40 0.39 1.00 0.95 0.90	V	I_F = 1.0mA I_F = 1.0mA I_F = 1.0mA I_F = 15mA I_F = 15mA I_F = 15mA
Maximum Peak Reverse Current	SD101A SD101B SD101C	I_{RM}	—	200	nA	V_R = 50V V_R = 40V V_R = 30V
Junction Capacitance	SD101A SD101B SD101C	C_j	—	2.0 2.1 2.2	pF	V_R = 0V, f = 1.0MHz
Reverse Recovery Time		t_{rr}	—	1.0	ns	I_F = I_R = 5.0mA, I_{rr} = 0.1 x I_R, R_L = 100Ω

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

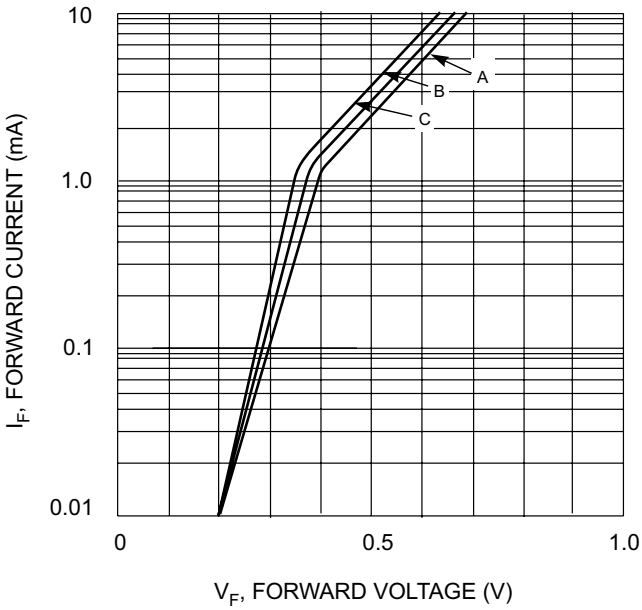


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

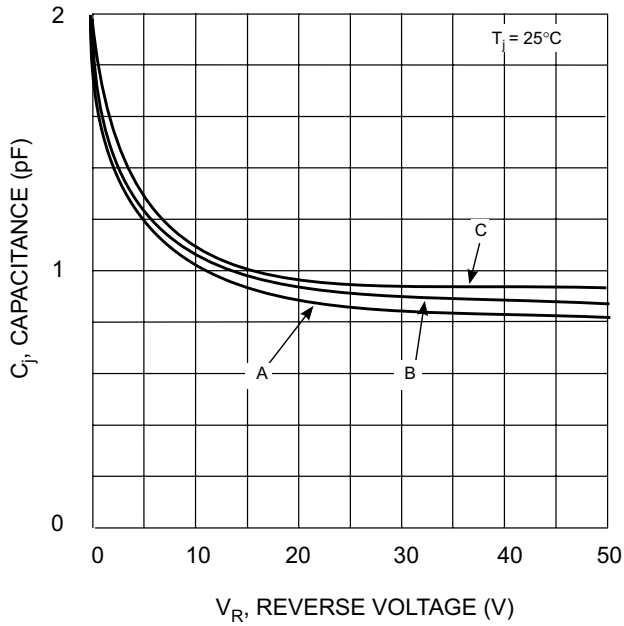


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage