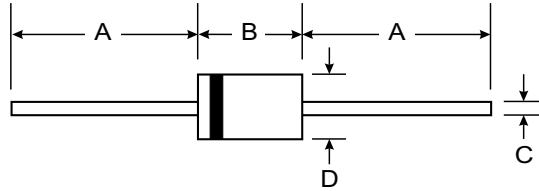


### Features

- 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.)

DO-35		
Dim	Min	Max
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SD101A	SD101B	SD101C	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	60	50	40	V
Working Peak Reverse Voltage	$V_{RWM}$				
DC Blocking Voltage	$V_R$				
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 @ $t \leq 1.0\text{s}$ @ $t = 10\mu\text{s}$	$I_{FSM}$	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			$^\circ\text{C}$

### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

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

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

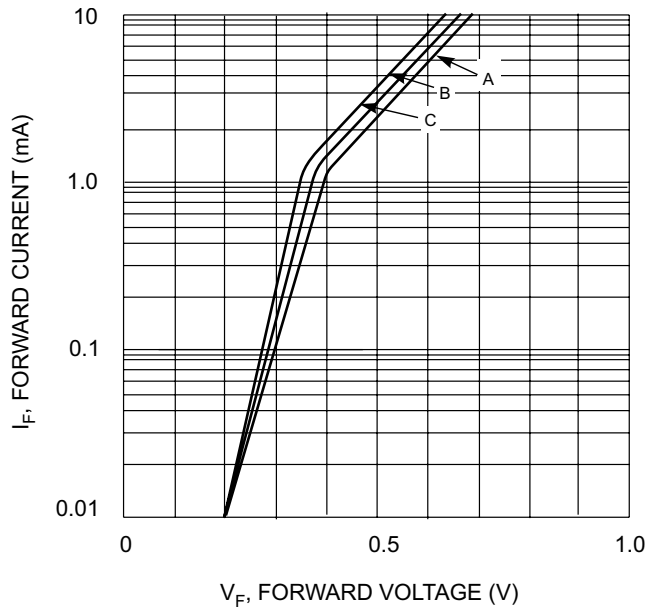


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

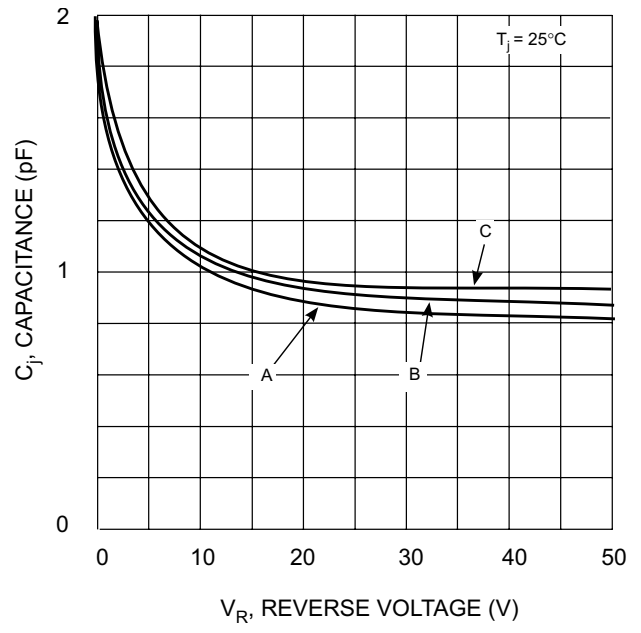


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage