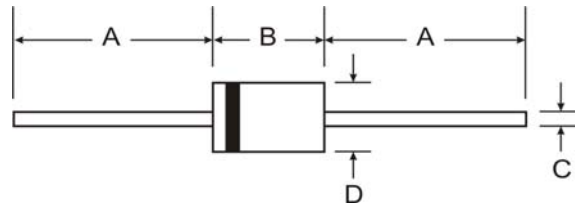


## Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance
- **Lead Free Finish, RoHS Compliant (Note 2)**



## Mechanical Data

- Case: DO-35
- Case Material: Glass
- Moisture Sensitivity: Level 1 per J-STD-020C
- Leads: Solderable per MIL-STD-202, Method 208
- Terminals: Finish — Matte Tin. Solderable per MIL-STD-202, Method 208 (E3)
- Polarity: Cathode Band
- Marking Information: See Page 2
- Ordering Information: See Page 2
- Weight: 0.13 grams (approximate)

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	$V_{RRM}$				
Working Peak Reverse Voltage	$V_{RWM}$	60	50	40	V
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 @ $t \leq 1.0\text{s}$	$I_{FSM}$		50		mA
@ $t = 10\mu\text{s}$			2.0		A
Power Dissipation (Note 1)	$P_d$		400		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$		375		$^\circ\text{C}/\text{W}$
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		0.41	V	$I_F = 1.0\text{mA}$		
	SD101B		0.40				
	SD101C		0.39				
	SD101A	$V_{FM}$	—			1.00	$I_F = 1.0\text{mA}$
	SD101B		0.95			$I_F = 15\text{mA}$	
	SD101C		0.90			$I_F = 15\text{mA}$	
Maximum Peak Reverse Current	SD101A		200	nA	$V_R = 50\text{V}$		
	SD101B				$V_R = 40\text{V}$		
	SD101C				$V_R = 30\text{V}$		
Total Capacitance	SD101A		2.0	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$		
	SD101B	$C_T$	2.1				
	SD101C		2.2				
Reverse Recovery Time	$t_{rr}$	—	1.0	ns	$I_F = I_R = 5.0\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		

- Notes:
1. Valid provided that leads are kept at ambient temperature.
  2. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and high temperature solder exemptions applied where applicable, see EU Directive Annex Notes 5 and 7.

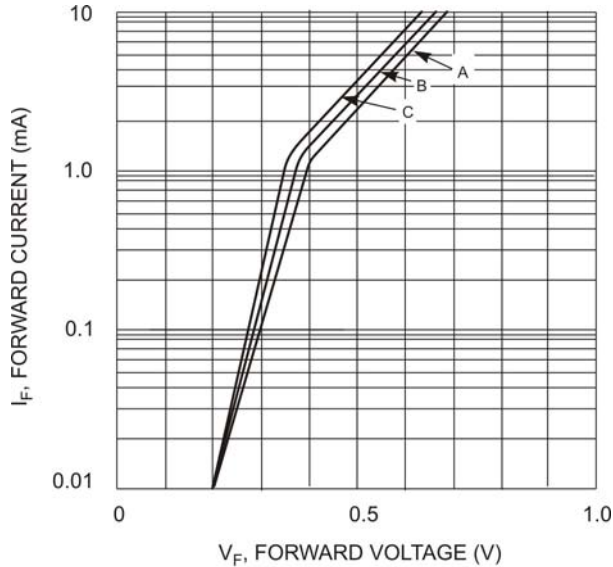


Fig. 1 Typical Forward Characteristics

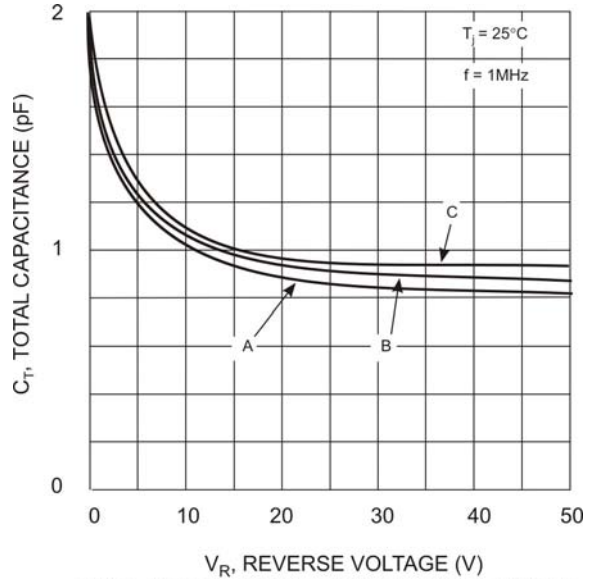


Fig. 2 Typical Total Capacitance vs Reverse Voltage

## Ordering Information (Note 3)

Device	Packaging	Shipping
SD101A-A	DO-35	10K/Ammo Pack
SD101A-T	DO-35	10K/Tape & Reel, 13-inch
SD101B-A	DO-35	10K/Ammo Pack
SD101B-T	DO-35	10K/Tape & Reel, 13-inch
SD101C-A	DO-35	10K/Ammo Pack
SD101C-T	DO-35	10K/Tape & Reel, 13-inch

Notes: 3. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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