

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-020D
- Leads: Solderable per MIL-STD-202, Method 208
- Terminals: Finish — Matte Tin. Solderable per MIL-STD-202, Method 208 
- Polarity: Cathode Band
- Marking Information: See Page 2
- Ordering Information: See Page 2
- Weight: 0.13 grams (approximate)

Maximum Ratings @T_A = 25°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 ≤ 1.0s	I _{FSM}	50			mA
@ t = 10μs		2.0			A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	P _D	400	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	375	°C/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	V _{FM}	—	0.41	V	I _F = 1.0mA
SD101B			0.40		I _F = 1.0mA
SD101C			0.39		I _F = 1.0mA
SD101A			1.00		I _F = 15mA
SD101B			0.95		I _F = 15mA
SD101C			0.90		I _F = 15mA
Maximum Peak Reverse Current	I _{RM}	—	200	nA	V _R = 50V
SD101B					V _R = 40V
SD101C					V _R = 30V
Total Capacitance	C _T	—	2.0	pF	V _R = 0V, f = 1.0MHz
SD101B			2.1		
SD101C			2.2		
Reverse Recovery Time	t _{rr}	—	1.0	ns	I _F = I _R = 5.0mA, I _{rr} = 0.1 x I _R , R _L = 100Ω

- Notes:
1. Valid provided that leads are kept at ambient temperature.
 2. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see *EU Directive 2002/95/EC Annex Notes*.

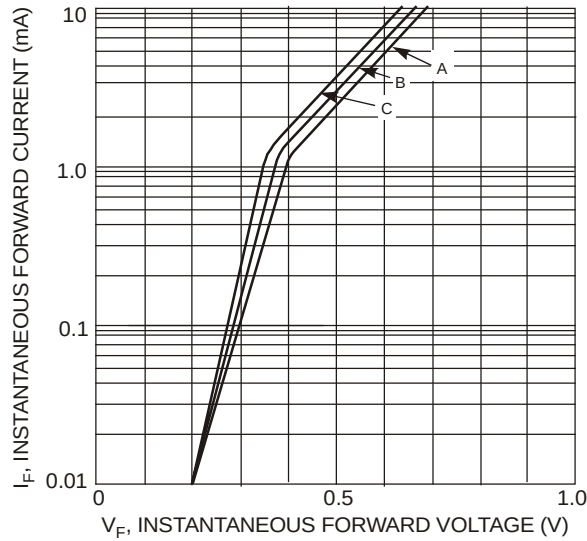


Fig. 1 Typical Forward Characteristics

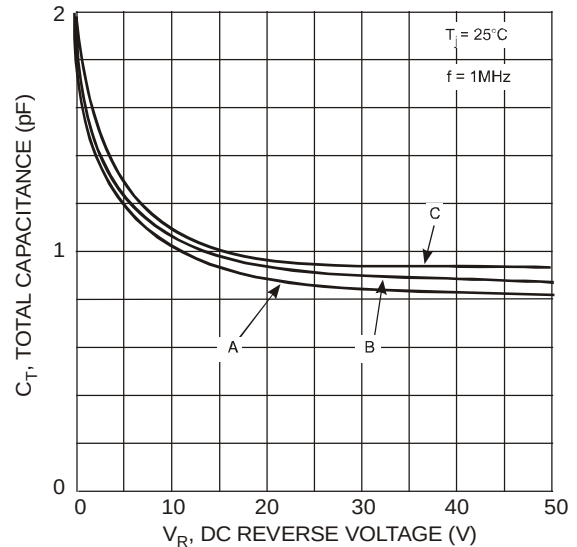


Fig. 2 Total Capacitance vs. Reverse Voltage

Ordering Information (Note 3)

Part Number	Case	Packaging
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

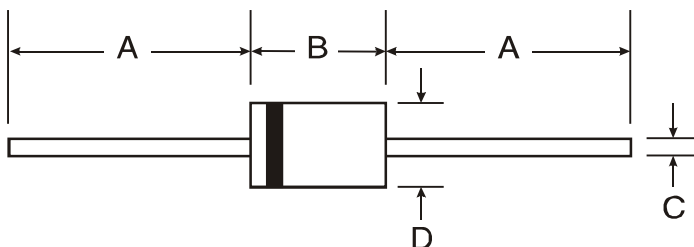
Notes: 3. For packaging details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information



SD101x= Product Type Marking Code
 (SD101A, SD101B, SD101C)
 X = Manufacturers' Code Marking
 YWW = Date Code Marking
 Y = Last digit of (ex: 2 for 2002)
 WW = Week code 01 to 52

Package Outline Dimensions



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

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