

SD101A - SD101C

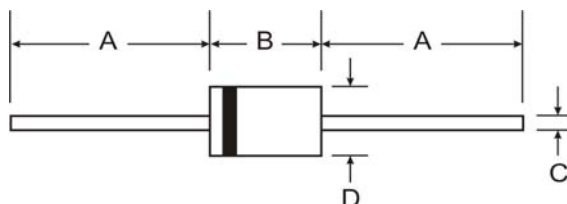
SCHOTTKY BARRIER DIODE

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 **Ⓔ**
- 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°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 ≤ 1.0s @ t = 10μs	I _{FSM}	50			mA
		2.0			A
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
			0.40		I _F = 1.0mA
			0.39		I _F = 1.0mA
			1.00		I _F = 15mA
			0.95		I _F = 15mA
			0.90		I _F = 15mA
Maximum Peak Reverse Current	I _{RM}	—	200	nA	V _R = 50V
					V _R = 40V
					V _R = 30V
Total Capacitance	C _T	—	2.0	pF	V _R = 0V, f = 1.0MHz
			2.1		
			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. 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.

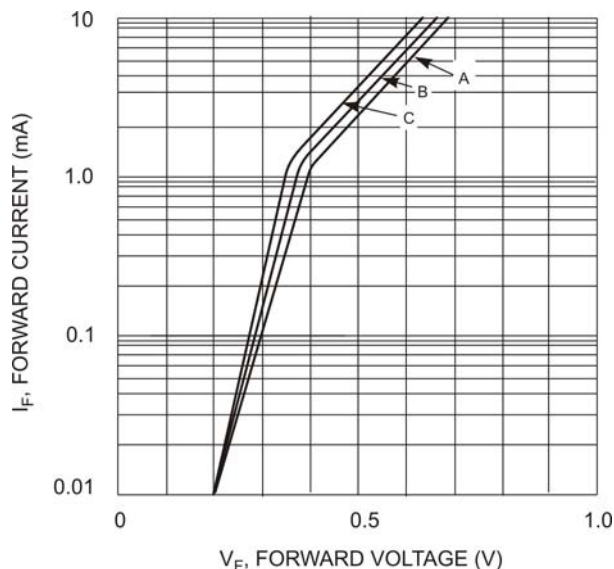


Fig. 1 Typical Forward Characteristics

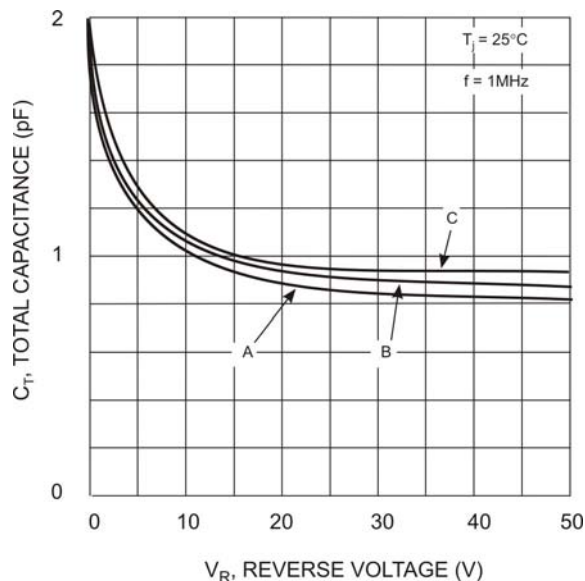


Fig. 2 Typical Total Capacitance vs Reverse Voltage

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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