

SD101A - SD101C

SCHOTTKY BARRIER DIODE

Features

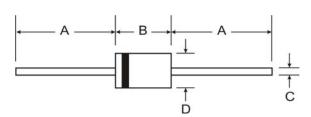
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance
- Lead Free Finish, RoHS Compliant (Note 2)

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 (3)
- Polarity: Cathode Band
- Marking Information: See Page 2
- Ordering Information: See Page 2
- Weight: 0.13 grams (approximate)



DO-35			
Dim	Min	Max	
Α	25.40	_	
В	_	4.00	
С	_	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}				
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			50		mA
@ t = 10μs	IFSM		2.0		Α
Power Dissipation (Note 1)	P_d		400		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	375			°C/W
Operating and Storage Temperature Range	T_j , T_{STG}	-65 to +175			°C

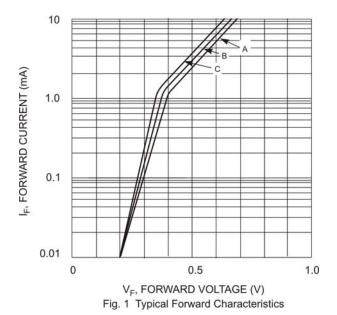
Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic		Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage Drop	SD101A			0.41		$I_F = 1.0 \text{mA}$
	SD101B			0.40		$I_F = 1.0 \text{mA}$
	SD101C	\/		0.39	V	$I_F = 1.0 \text{mA}$
	SD101A	A V _{FM}		1.00	ľ	$I_F = 15mA$
	SD101B			0.95		$I_F = 15mA$
	SD101C			0.90		$I_F = 15mA$
Maximum Peak Reverse Current	SD101A					$V_{R} = 50V$
	SD101B	I _{RM}		200	nA	$V_R = 40V$
	SD101C					$V_R = 30V$
Total Capacitance	SD101A			2.0		
	SD101B	C _T		2.1	pF	$V_R = 0V, f = 1.0MHz$
	SD101C			2.2		
Doverno Dogovery Time		4		1.0		$I_F = I_R = 5.0 \text{mA},$
Reverse Recovery Time		t _{rr}	_	1.0	ns	$I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Notes:

- 1. Valid provided that leads are kept at ambient temperature.
- 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.





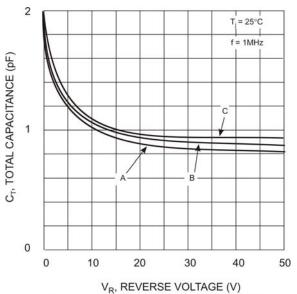


Fig. 2 Typical Total Capacitance vs Reverse Voltage

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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