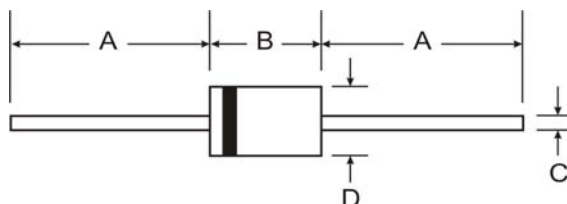


Features

- 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 — Sn96.5Ag3.5. Solderable per MIL-STD-202, Method 208 (E3)
- Polarity: Cathode Band
- Marking Information: See Page 3
- Ordering Information: See Page 3
- 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	SD103A	SD103B	SD103C	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	30	20	V
Working Peak Reverse Voltage	V _{RWM}				
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{R(RMS)}	28	21	14	V
Forward Continuous Current	I _{FM}	350			mA
Repetitive Peak Forward Current (Note 1) @ t ≤ 1.0s	I _{FRM}	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3 ms Half Sine Wave	I _{FSM}	15			A
Power Dissipation (Note 1)	P _d	400			mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	300			°C/W
Operating Junction Temperature	T _J	125			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 3)	V _{(BR)R}	40 30 20	—	—	V	I _R = 100μA
Maximum Forward Voltage Drop	V _{FM}	—	—	0.37 0.60	V	I _F = 20mA I _F = 200mA
Maximum Peak Reverse Current (Note 3)	I _{RM}	—	—	5.0	μA	V _R = 30V V _R = 20V V _R = 10V
Total Capacitance	C _T	—	50	—	pF	V _R = 0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	10	—	ns	I _F = I _R = 50mA to 200mA, I _{rr} = 0.1 x I _R , R _L = 100Ω

- Notes:
1. Valid provided that device terminals 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.
 3. Short duration test pulse used to minimize self-heating effect.

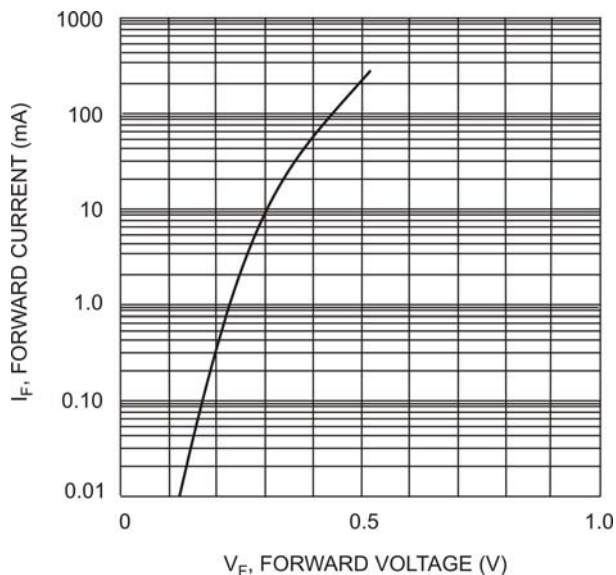


Fig. 1 Typical Forward Characteristics

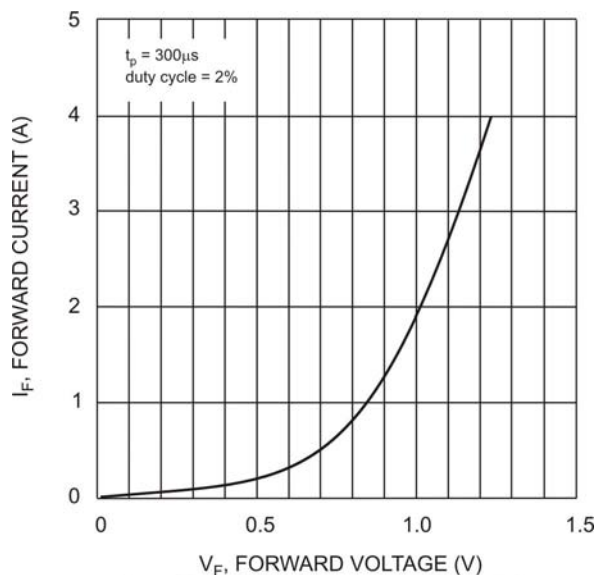


Fig. 2 Typical High Current Fwd Characteristics

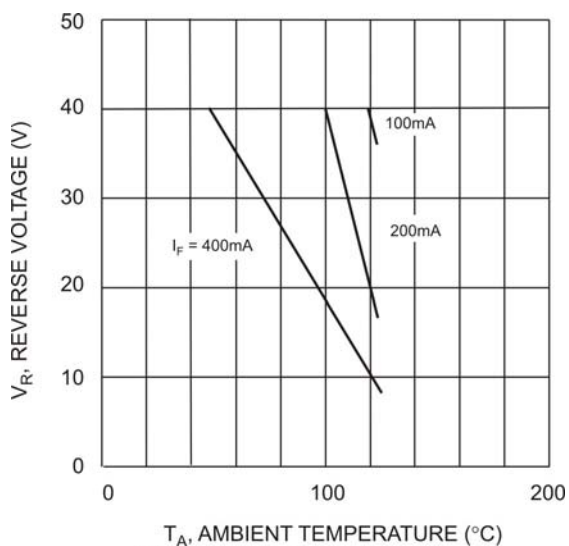


Fig. 3 Blocking Voltage Derating Curves

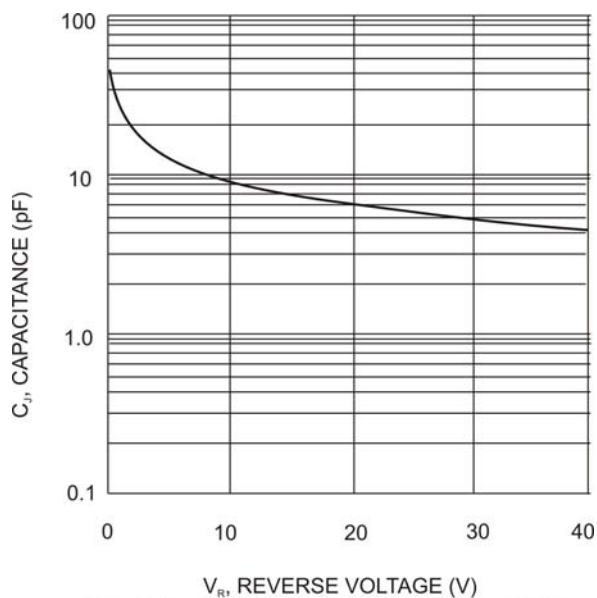


Fig. 4 Typ. Junction Capacitance vs Reverse Voltage

Ordering Information (Note 4)

Device	Packaging	Shipping
SD103A-A	DO-35	10,000 / Ammo Pak
SD103A-T	DO-35	10,000 / Tape & Reel
SD103B-A	DO-35	10,000 / Ammo Pak
SD103B-T	DO-35	10,000 / Tape & Reel
SD103C-A	DO-35	10,000 / Ammo Pak
SD103C-T	DO-35	10,000 / Tape & Reel

Notes: 4. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information



IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.