



SCHOTTKY BARRIER DIODE

SD103A THRU SD103C

VOLTAGE RANGE
CURRENT

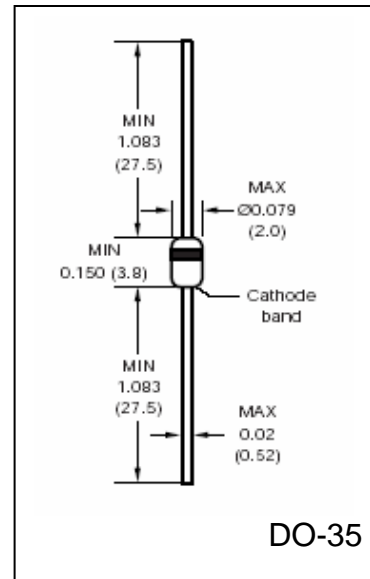
20 To 40 Volts
350 mA

FEATURES

- Fast Switching speed
- Low forward voltage
- Low capacitance
- Guard ring for transient and ESD protection
- Also available in the SOD-123 package as SD103AW and Mini-Melf as LL103A

MECHANICAL DATA

- Case: DO-35
- Leads: Axial, solderable per MIL-STD-202 Method 208
- Polarity: Color band denotes cathode end
- Weight: 0.0045 ounce, 0.13 gram, approx.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOLS	SD103C	SD103B	SD103C	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	30	20	Volt
Continuous Reverse Voltage	V_R	40	30	20	Volt
RMS Reverse Voltage	V_{rms}	28	21	14	Volt
Forward Continuous Current (Note 1)	I_{FM}	350			mA
Repetitive Peak Forward Surge Current @ $T = 1.0S$	I_{FSM}	1.0			Amps
Non-Repetitive Peak Forward Surge Current 8.3 mS	I_{FSM}	15			Amps
Maximum Forward Voltage @ 20mA 200mA	V_F	0.37 0.60			Volts
Maximum Leakage Current, @ $T_j = 25^\circ$	I_R	5.0 @ $V_F = 30V$	5.0 @ $V_F = 20V$	5.0 @ $V_F = 10V$	μA
Maximum Reverse Recovery Time $I_F = 10mA, I_R = 10mA, I_{RR} = 1mA, R_L = 100\Omega$	t_{rr}	10			nS
Power dissipation (Note 1)	P_{TOT}	400			mW
Typical Junction Capacitance, $V_F = 1V, f = 1MHz$	C_J	50			pF
Typical Thermal Resistance	$R_{\theta JA}$	300			$^\circ C/W$
Operating Junction Temperature Range	T_J	(-55 to +150)			$^\circ C$
Storage Temperature Range	T_{STG}	(-55 to +150)			$^\circ C$

Notes:

1. Valid provided leads are kept at ambient



RATINGS AND CHARACTERISTIC CURVES SD103A THRU SD103C

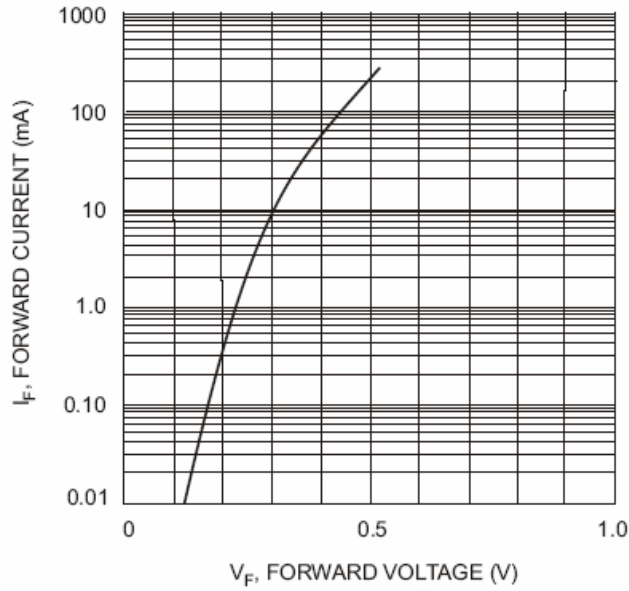


Fig. 1 Typical Forward Characteristics

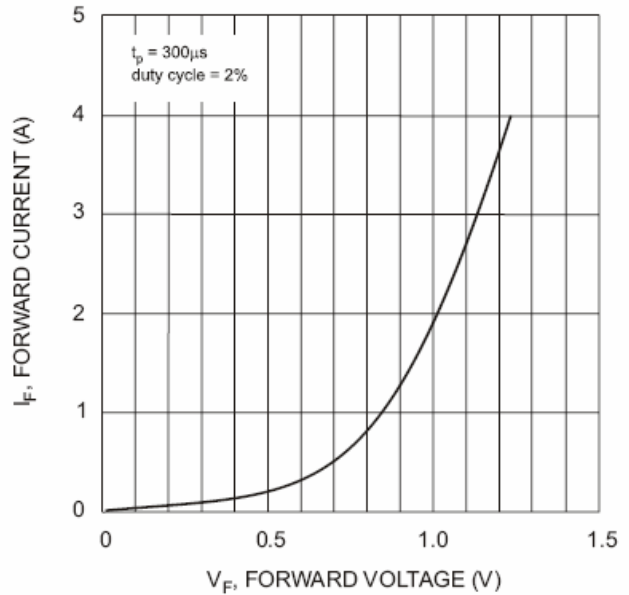


Fig. 2 Typical High Current Fwd Characteristics

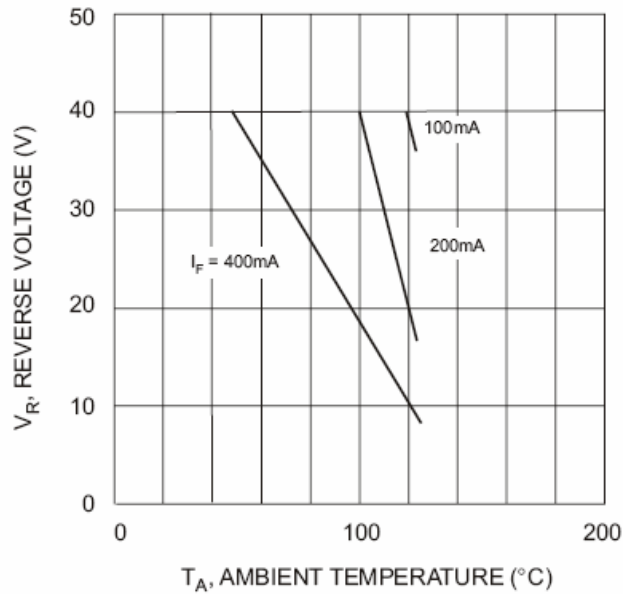


Fig. 3 Blocking Voltage Derating Curves

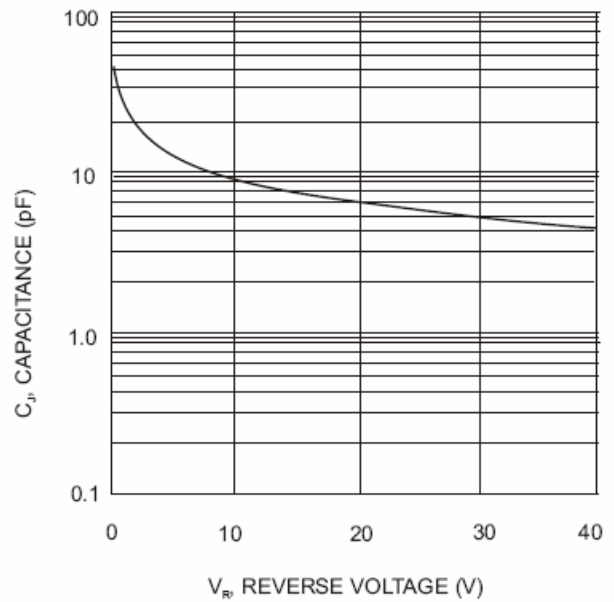


Fig. 4 Typ. Junction Capacitance vs Reverse Voltage