



## SCHOTTKY BARRIER DIODE

### LL103A THRU LL103C

VOLTAGE RANGE  
CURRENT

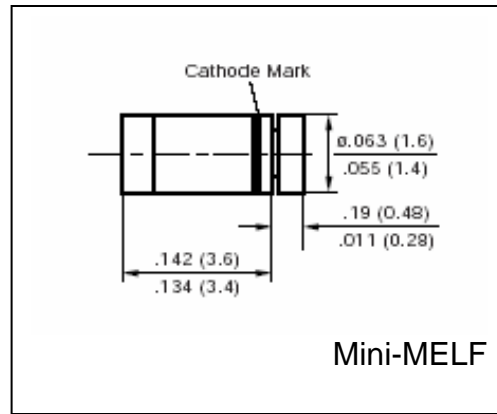
20 To 40 Volts  
350 mA

#### FEATURES

- Fast Switching speed
- Low forward voltage
- Low capacitance
- Guard ring for transient and ESD protection
- Also available in the DO-35 package as SD103A and SOD-123 as SD103AW

#### MECHANICAL DATA

- Case: Mini-MELF
- Terminals: solderable per MIL-STD-202 Method 208
- Polarity: Color band denotes cathode end
- Weight: 0.0017 ounce, 0.05 gram, approx.



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOLS	LL103C	LL103B	LL103C	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 300 $\mu$ S, square wave	$I_{FSM}$	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 @ $V_F = 10V$	$\mu$ A
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 terminals are kept at ambient



## RATINGS AND CHARACTERISTIC CURVES LL103A THRU LL103C

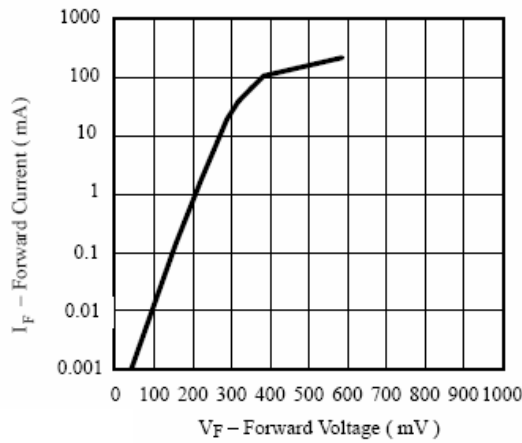


Figure 1. Forward Current vs. Forward Voltage

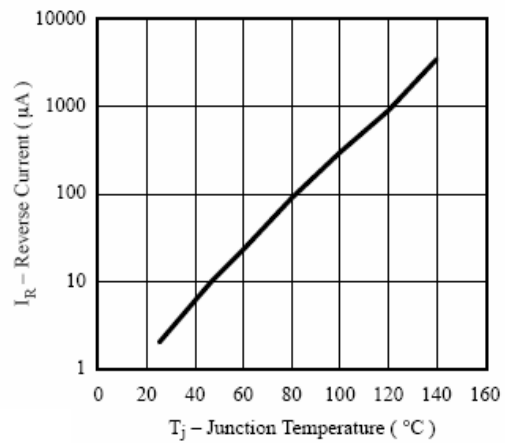


Figure 3. Reverse Current vs. Junction Temperature

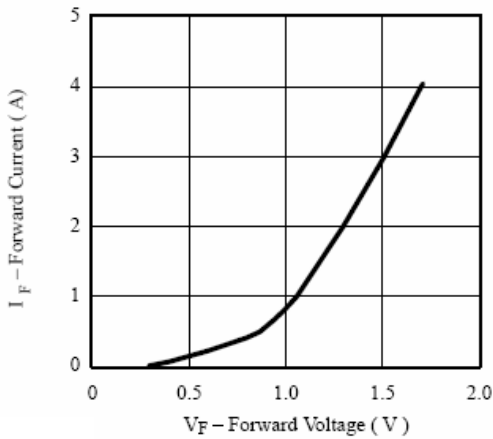


Figure 2. Forward Current vs. Forward Voltage

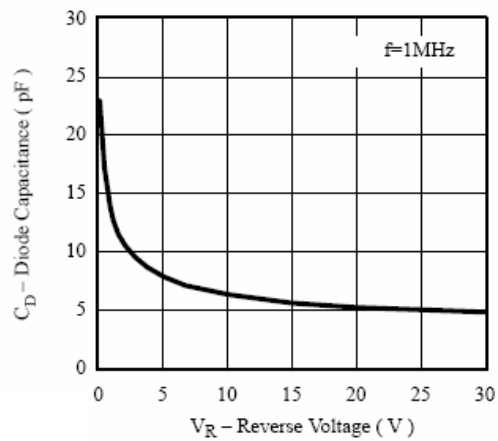


Figure 4. Diode Capacitance vs. Reverse Voltage

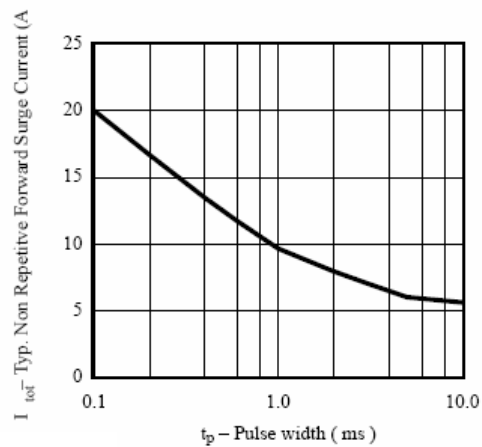


Figure 5. Typ. Non Repetitive Forward Surge Current vs. Pulse width