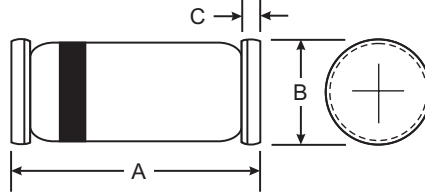# LL / LLSD103A - 103C

SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance

Mechanical Data

- Case: MiniMELF, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Marking: Cathode Band Only
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)

MiniMELF		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	LL / LLSD103A	LL / LLSD103B	LL / LLSD103C	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	30	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current (Note 1)	I_{FM}	350			mA
Repetitive Peak Forward Current @ t ≤ 1.0s	I_{FRM}	1.0			A
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 10ms	I_{FSM}	1.5 7.5			A
Power Dissipation (Note 1)	P_d	400			mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	250			K/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	Typ	Max	Unit	Test Condition
Maximum Forward Voltage Drop	V_{FM}	—	—	0.37 0.60	V	I_F = 20mA I_F = 200mA
Maximum Peak Reverse Current LL / LLSD103A LL / LLSD103B LL / LLSD103C	I_{RM}	—	—	5.0	μA	V_R = 30V V_R = 20V V_R = 10V
Junction Capacitance	C_j	—	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

Note: 1. Valid provided that electrodes are kept at ambient temperature.
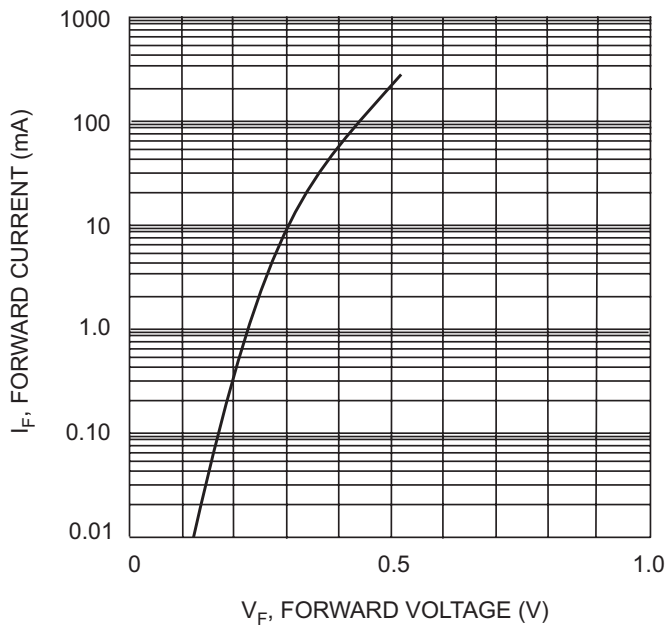
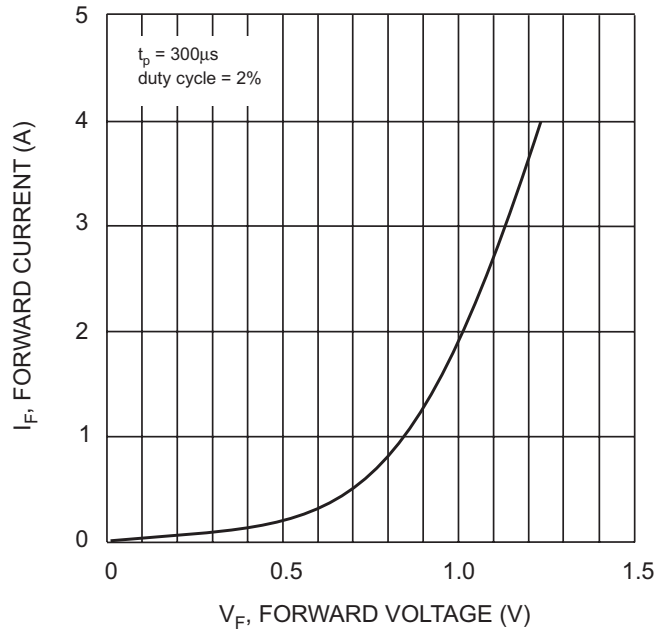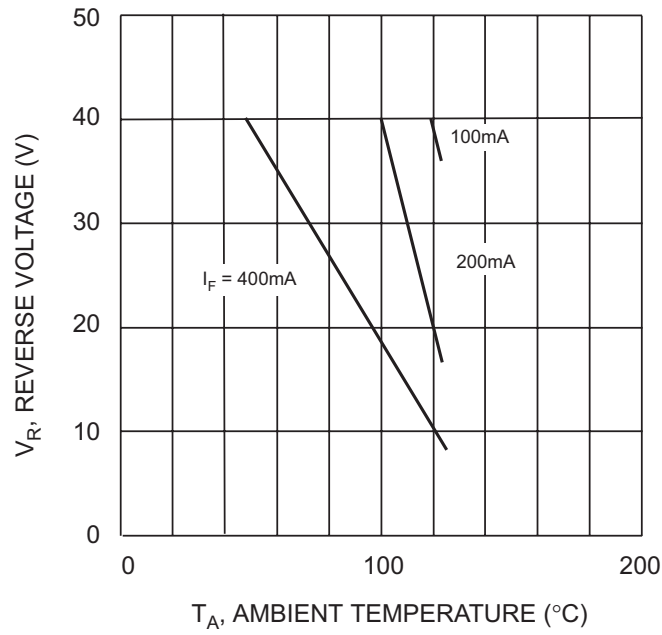Fig. 1 Typical Forward Characteristics

Fig. 2 Typical High Current Fwd Characteristics

Fig. 3 Blocking Voltage Derating Curves

LL / LLSD103A - 103C