

Schottky Barrier Diodes

(Pb) Lead(Pb)-Free

Features:

- * Small surface mounting type
- * High reliability
- * Low reverse current and low forward voltage
- * Low current rectification and high speed switching

Mechanical Data:

- *Case : MINI-MELF Glass Case (SOD-80)
- *Polarity: Color Band Denotescathode Band
- *Weight : Approx 0.05 gram

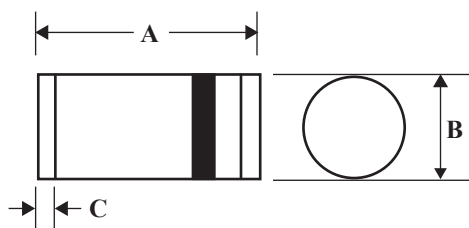
Schottky Barrier Diode
350 mAMPERES
20-40 VOLTS



MINI-MELF

MINI-MELF Outline Dimensions

Unit:mm



MINI MELF		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50

Maximum Ratings ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Characteristic	Symbol	LL103A	LL103B	LL103C	Unit
Peperitive Peak Reverse Voltage	V_{RRM}	40	30	20	V
Repetitive peak forward current $t_p \leq 1s$	I_{FSM}	1.0			A
Forward Continuous Current, $T_A=25^{\circ}\text{C}$	I_F	350			mA
Power dissipation, $T_A=25^{\circ}\text{C}$	P_D	400			mW
Junction ambient On PC board 50mm×50mm×1.6mm	$R_{\theta JA}$	250			K/W
Operating Temperature Range	T_J	+175			$^{\circ}\text{C}$
Stororage Temperature Range	T_{STG}	-65 to +175			$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Characteristic	Symbol	Min	Tpy	Max	Unit
Forward Voltage $I_F = 20\text{mA}$ $I_F = 200\text{mA}$	V_F	- -	- -	0.37 0.6	V
Rverse Current $V_R=30\text{V}$ LL103A $V_R=20\text{V}$ LL103B $V_R=10\text{V}$ LL103C	I_R	- - -	- - -	5.0 5.0 5.0	μA
Diode capacitance $V_R=V_F=0$, $f=1\text{MHz}$	C_D	-	50	-	PF
Reverse Recovery Time $I_F=I_R=200\text{mA}$ to 0.1mA I_R	T_{rr}	-	10	-	nS

Typical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

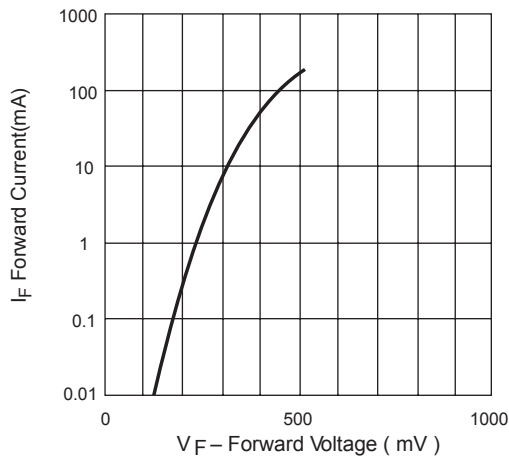


Fig. 1 Forward Current vs. Forward Voltage

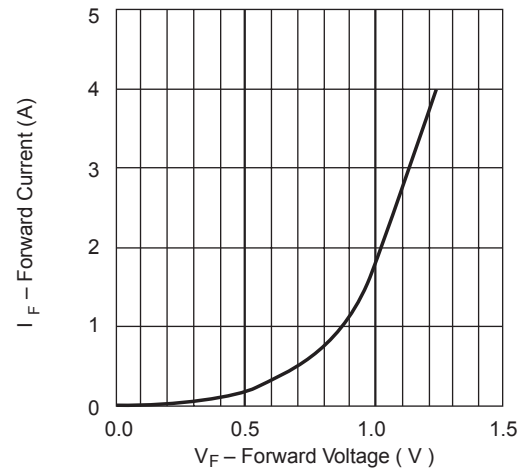


Fig. 2 Forward Current vs. Forward Voltage

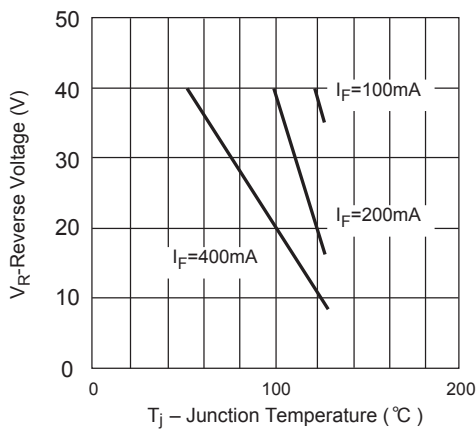


Fig. 3 Reverse Voltage vs. Junction Temperature

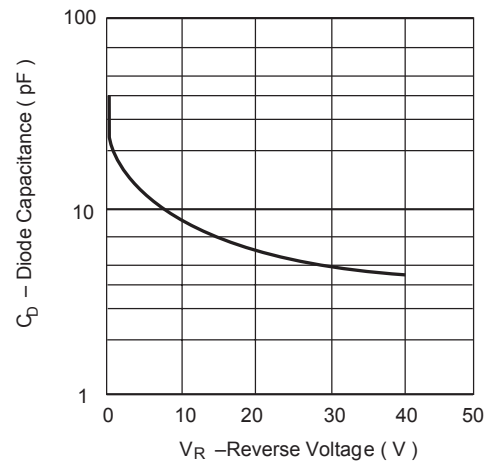


Fig. 4 Diode Capacitance vs. Reverse Voltage

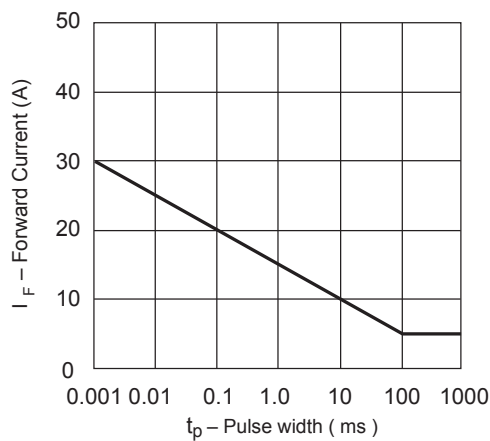


Fig. 5 Forward Current vs. Pulse width

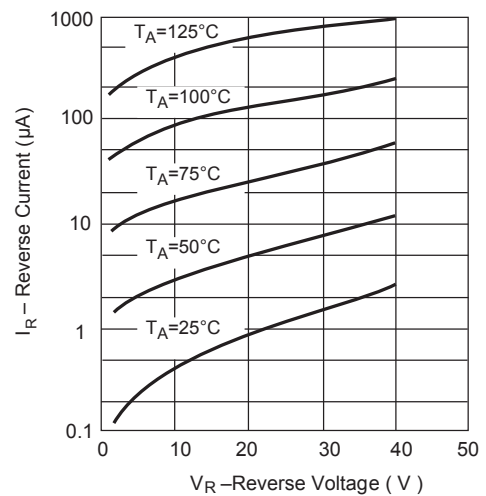


Fig. 6 Reverse Current vs. Reverse Voltage