# WEITRON

# LL103A/B/C

## Schottky Barrier Diodes

**Lead(Pb)-Free**

**Schottky Barrier Diode**
**350 mAMPERES**
**20-40 VOLTS**

**Features:**

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



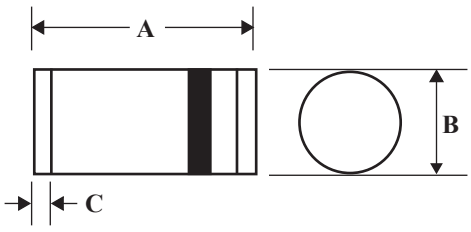
**MINI-MELF**

**Mechanical Data:**

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

## 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°C Unless otherwise noted)

| Characteristic | Symbol | LL103A | LL103B | LL103C | Unit |
|---|---|---|---|---|---|
| Pepetitive 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 °C | $I_F$ | 350 | | | mA |
| Power dissipation,$T_A$=25°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 | | | °C |
| Strorage Temperature Range | $T_{STG}$ | -65 to +175 | | | °C |

## Electrical Characteristics ($T_A$=25°C Unless otherwise noted)

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

## Typical Characteristics ($T_A$ = 25 °C unless otherwise specified)

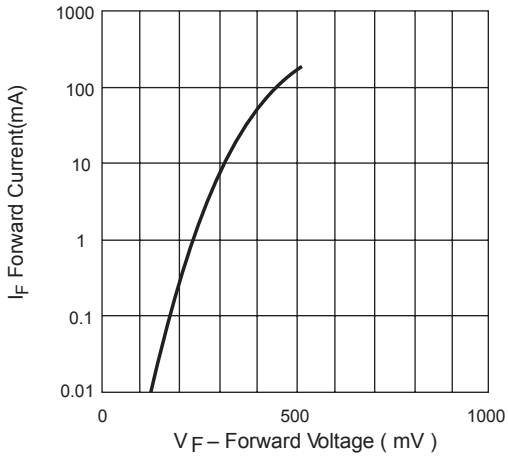



**Fig. 1 Forward Current vs. Forward Voltage**

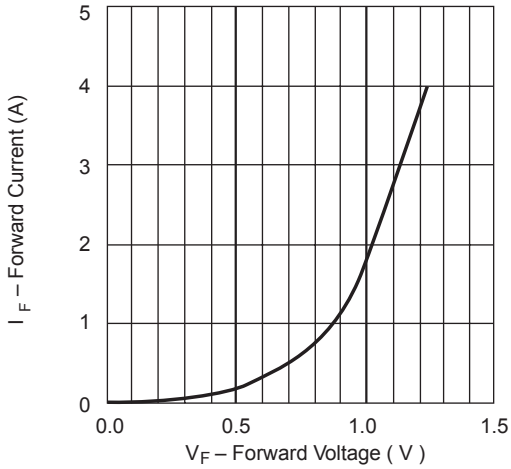



**Fig. 2 Forward Current vs. Forward Voltage**

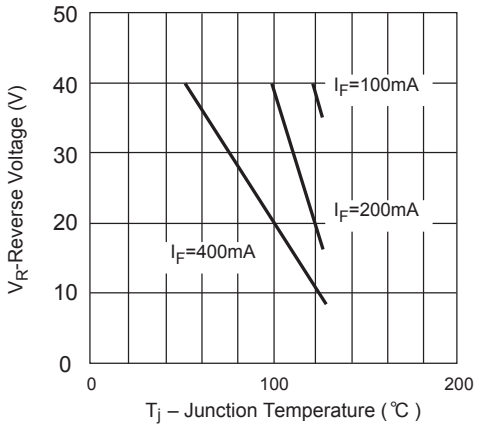



**Fig. 3 Reverse Voltage vs. Junction Temperature**

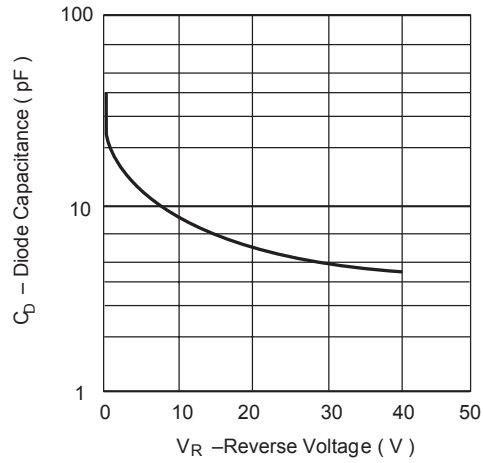



**Fig. 4 Diode Capacitance vs. Reverse Voltage**

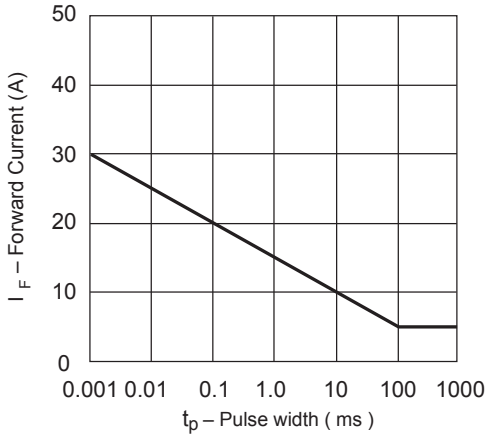



**Fig. 5 Forward Current vs. Pulse width**

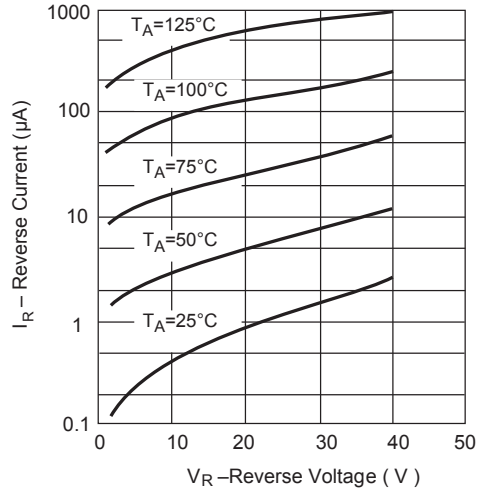



**Fig. 6 Reverse Current vs. Reverse Voltage**