

# LLSD103A~LLSD103C

## SMALL SIGNAL SCHOTTKY BARRIES SWITCHING DIODES

**VOLTAGE** 20 to 40 Volts **CURRENT** 0.35 Amperes

**MINI-MELF/LL-34**

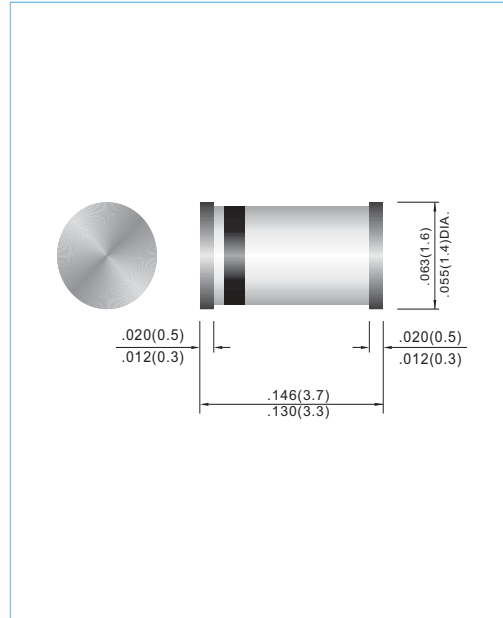
Unit : inch (mm)

### FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Molded Glass MINI MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.03 grams
- Mounting Position: Any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

| PARAMETER  | SYMBOL             | LLSD103A     | LLSD103B | LLSD103C | UNITS  |
|--|--------------------|--------------|----------|----------|--------|
| Peak Repetitive Reverse Voltage  | V <sub>RRM</sub>   | 40           | 30       | 20       | V      |
| RMS Reverse Voltage  | V <sub>RMS</sub>   | 28           | 21       | 14       | V      |
| Max. Average Rectified Current   | I <sub>F(AV)</sub> | 350          |          |          | mA     |
| Peak Forward Surge Current, t ≤ 0.3ms                                    | I <sub>F(SM)</sub> | 15           |          |          | A      |
| Power Dissipation Derate Above 25°C                                      | P <sub>D</sub>     | 400          |          |          | mW     |
| Maximum Forward Voltage, I <sub>F</sub> = 20mA<br>I <sub>F</sub> = 200mA | V <sub>F</sub>     | 0.37<br>0.70 |          |          | V      |
| Maximum Reverse Current  | I <sub>R</sub>     | 5 @ 30V      | 5 @ 20V  | 5 @ 10V  | μA     |
| Typical Junction Capacitance( Note 1)                                    | C <sub>J</sub>     | 50           |          |          | pF     |
| Typical Reverse Recovery (Note 2)  | t <sub>rr</sub>    | 10           |          |          | ns     |
| Typical Thermal Resistance   | R <sub>θJA</sub>   | 250          |          |          | °C / W |
| Storage Temperature Range  | T <sub>STG</sub>   | -65 to +175  |          |          | °C     |

**NOTE:**

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=50mA to I<sub>R</sub>=200mA, R<sub>L</sub>=100Ω

# LLSD103A~LLSD103C

## RATING AND CHARACTERISTIC CURVES

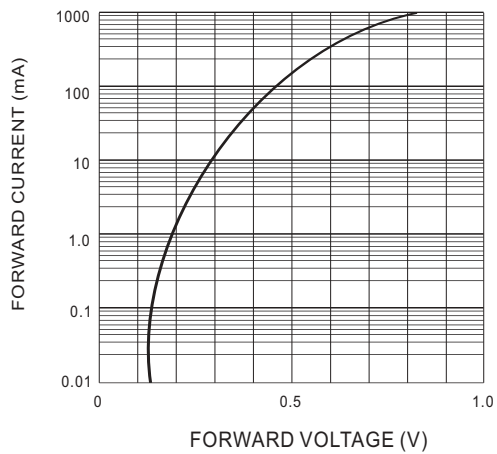


Fig. 1 FORWARD CHARACTERISTICS

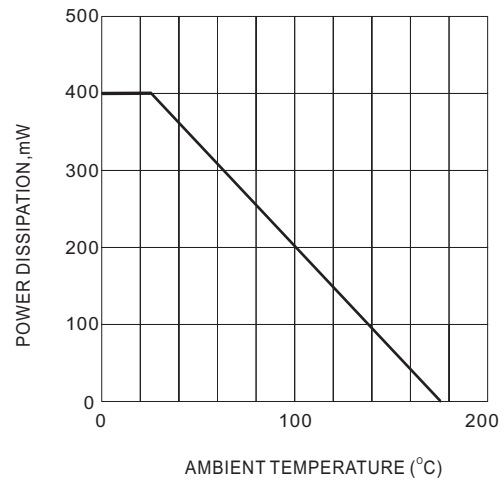


Fig. 2 POWER DISSIPATION DERATING CURVE

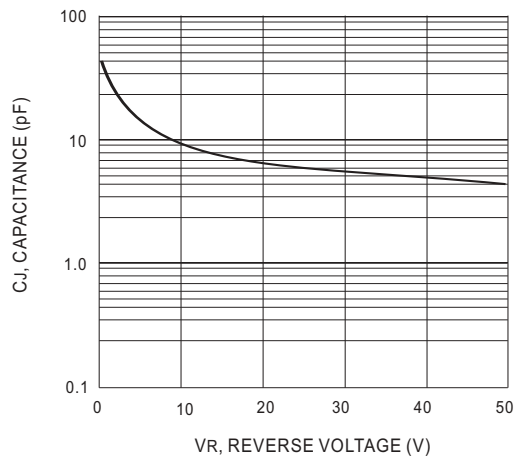
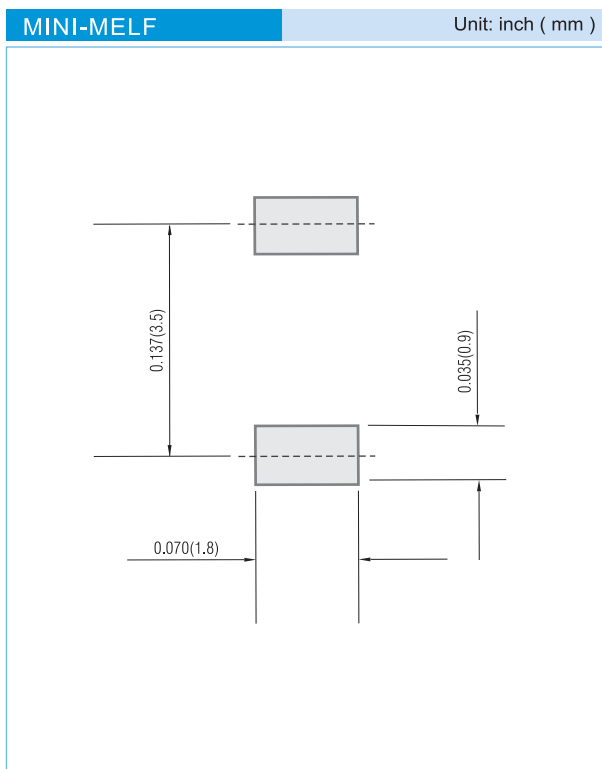


Fig. 3 TYPICAL CAPACITANCE vs REVERSE VOLTAGE

# LLSD103A~LLSD103C

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 2.5K per 7" plastic Reel

## LEGAL STATEMENT

### Copyright PanJit International, Inc 2009

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.