

## DC COMPONENTS CO., LTD.

#### RECTIFIER SPECIALISTS

LL42 LL43

# TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER VOLTAGE RANGE - 30 Volts CURRENT - 0.2 Ampere

#### **FEATURES**

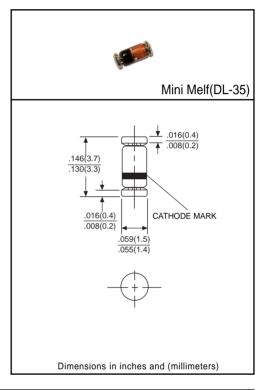
- \* For general purpose applications
- \* Low turn-on voltage
- \* Fast switching time
- \* Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD)
- \* Double slug type construction

#### MECHANICAL DATA

- \* Case: Glass sealed case Mini Melf(DL-35)
- \* Terminals: Solder plated solderable per MIL-STD-750, Method 2026
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
  \* Weight: 0.05 gram approx.

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.



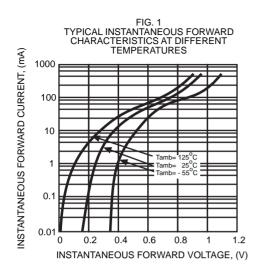
|  | SYMBOL   | LL42           | LL43             | UNITS |
|--|----------|----------------|------------------|-------|
| Maximum Recurrent Peak Reverse Voltage               | VRRM     | 30             |                  | Volts |
| Maximum RMS Voltage                                  | VRMS     | 21             |                  | Volts |
| Maximum DC Blocking Voltage                          | VDC      | 30             |                  | Volts |
| Maximum Average Forward Rectified Current at TA=75°C | lo       | 0.2            |                  | Amps  |
| Peak Forward Surge Current at t=10mS                 | IFSM     | 4.0            |                  | Amps  |
| Maximum Instantaneous Forward Voltage                | VF       | 1.0 @ IF=0.2A  |                  | Volts |
|  |          | 0.4 @ IF=0.01A | 0.33 @ IF=0.002A | Volts |
| Maximum DC Reverse Current @ VR=25V                  | lR       | 0.5            |                  | μAmps |
| Typical Thermal Resistance (Note1)                   | RθJA     | 300            |                  | °C/W  |
| Typical Junction Capacitance (Note 2)                | Cı       | 10             |                  | pF    |
| Storage Operating Temperature Range                  | TJ, TSTG | -55 to +125    |                  | °C    |

NOTES: 1. Terminals maintained at specified ambient temperature.

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<sup>2.</sup> Measured at 1 MHz and applied reverse voltage of 1.0 volts.

### **RATING AND CHARACTERISTIC CURVES (LL42 AND LL43)**



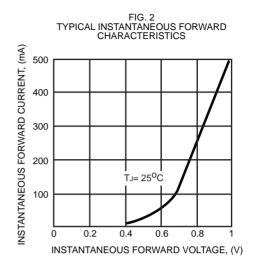


FIG. 3 TYPICAL REVERSE CURRENT VERSUS AMBIENT TEMPERATURE

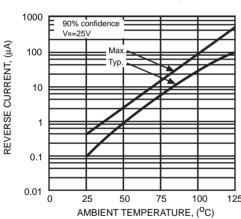


FIG. 4
TYPICAL REVERSE CHARACTERISTICS

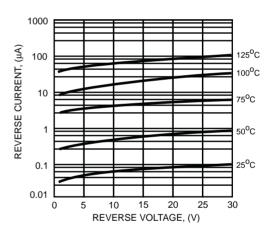
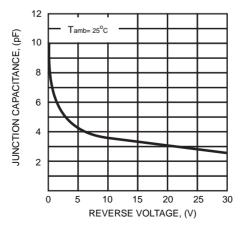


FIG. 5
TYPICAL JUNCTION CAPACITANCE



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