

LL5817 - LL5819

PRV : 20 - 40 Volts

I_o : 1.0 Ampere

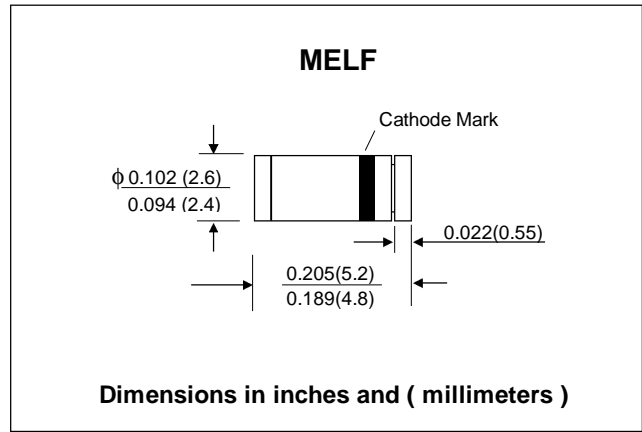
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : MELF, Plastic
- * Terminals : Solderable per MIL-STD-202, Method 208
- * Polarity : Color band
- * Approx Weight : 0.25 grams
- * Mounting Position : Any

SCHOTTKY BARRIER RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| RATING | SYMBOL | LL5817 | LL5818 | LL5819 | UNIT |
|---|--------------------|-----------------|--------|--------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | V |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | V |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 30 | 40 | V |
| Maximum Average Forward Current 0.375", 9.5mm Lead Length at T _L = 90 °C | I _{F(AV)} | 1.0 | | | A |
| Maximum Peak Forward Surge Current, 8.3ms single half sine wave Superimposed on rated load (JEDEC Method) | I _{FSM} | 25 | | | A |
| Maximum Forward Voltage at I _F = 1.0 A | V _F | 0.45 | 0.55 | 0.60 | V |
| Maximum Reverse Current at Rated DC Blocking Voltage | I _R | 1.0 (Ta = 25°C) | | | mA |
| | I _{R(H)} | 10 (Ta = 100°C) | | | mA |
| Typical Thermal Resistance (Note 1) | R _{θJA} | 80 | | | °C/W |
| Typical Junction Capacitance (Note 2) | C _J | 110 | | | pF |
| Junction Temperature Range | T _J | - 65 to + 125 | | | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 125 | | | °C |

Notes :

- (1) Thermal Resistance from junction to ambient
- (2) Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (LL5817 - LL5819)

FIG.1 - FORWARD CURRENT DERATING CURVE

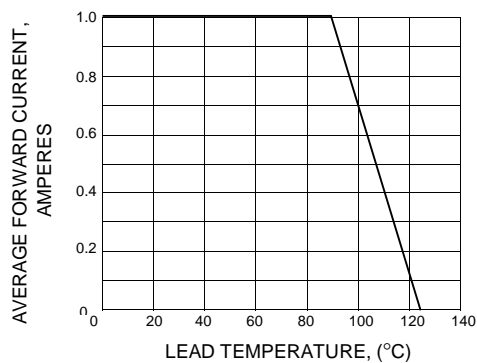


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

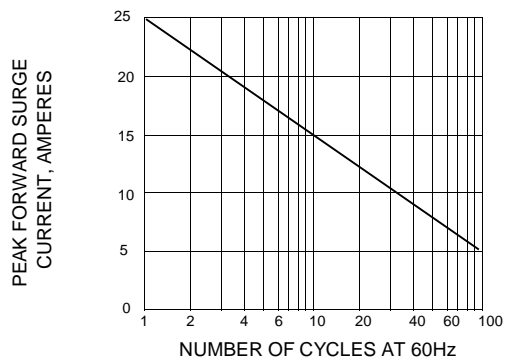


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

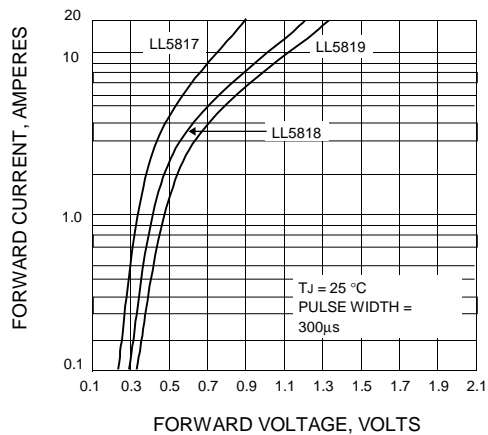


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

