

# LL5817 - LL5819

**PRV : 20 - 40 Volts**  
**I<sub>o</sub> : 1.0 Ampere**

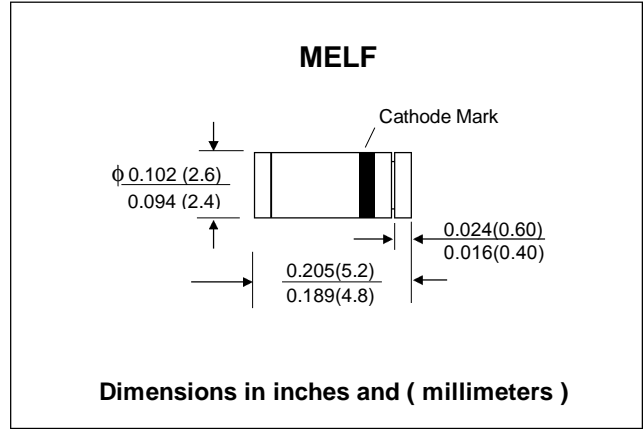
**FEATURES :**

- \* 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 <sub>RRM</sub>	20	30	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	V
Maximum Average Forward Current 0.375", 9.5mm Lead Length at T <sub>L</sub> = 90 °C	I <sub>F(AV)</sub>	1.0			A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	25			A
Maximum Forward Voltage at I <sub>F</sub> = 1.0 A	V <sub>F</sub>	0.45	0.55	0.60	V
Maximum Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	1.0 (Ta = 25°C)			mA
	I <sub>R(H)</sub>	10 (Ta = 100°C)			mA
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	80			°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	110			pF
Junction Temperature Range	T <sub>J</sub>	- 65 to + 125			°C
Storage Temperature Range	T <sub>STG</sub>	- 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

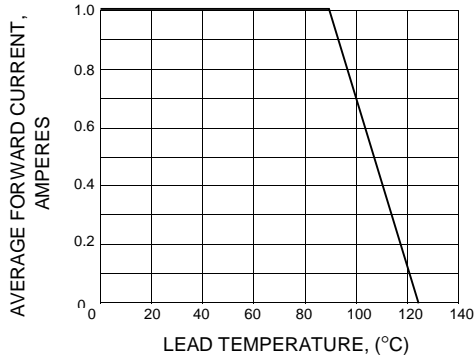


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

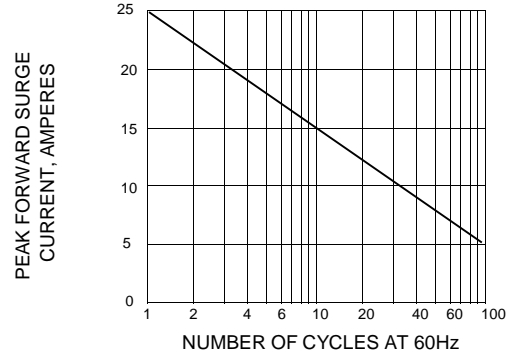


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

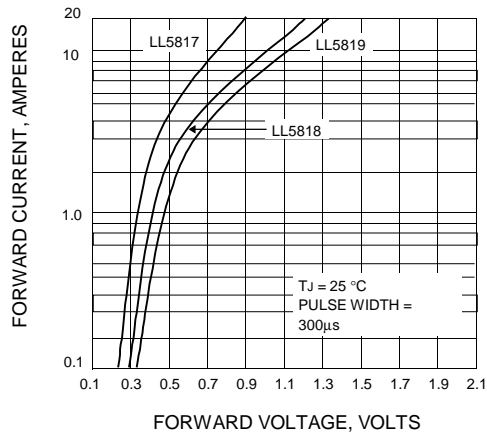


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

