

LL5817 - LL5819

PRV : 20 - 40 Volts

I_o : 1.0 Ampere

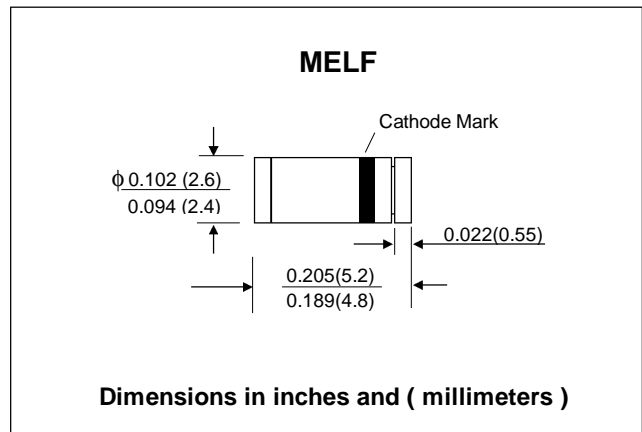
FEATURES :

- * 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 $T_L = 90\text{ }^\circ\text{C}$	$I_{F(AV)}$	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 $I_F = 1.0\text{ A}$	V_F	0.45	0.55	0.60	V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	1.0 ($T_a = 25\text{ }^\circ\text{C}$)			mA
	$I_{R(H)}$	10 ($T_a = 100\text{ }^\circ\text{C}$)			mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	80			$^\circ\text{C/W}$
Typical Junction Capacitance (Note 2)	C_J	110			pF
Junction Temperature Range	T_J	- 65 to + 125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 125			$^\circ\text{C}$

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

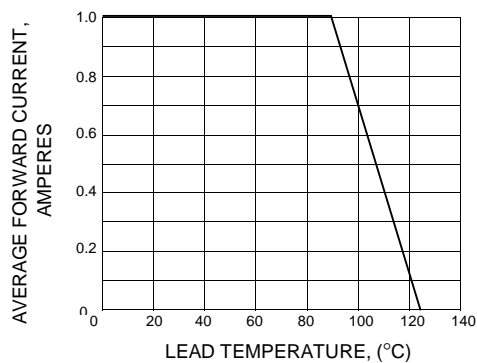


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

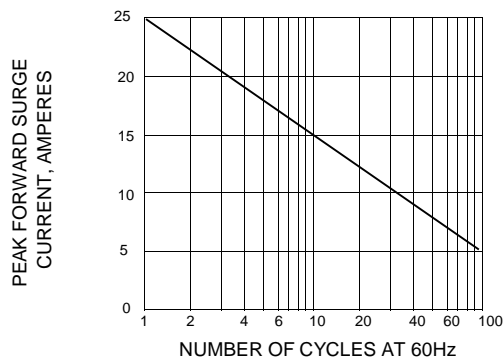


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

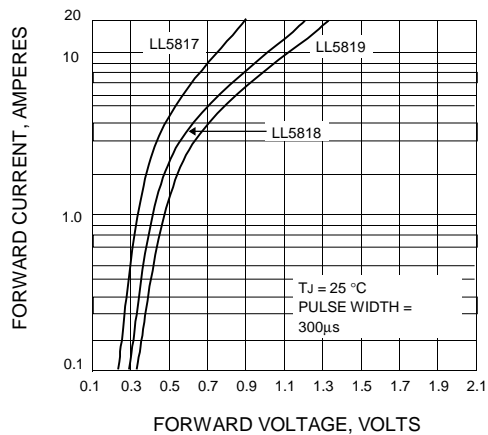


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

