



LL5817 THRU LL5819

1.0 AMP. Surface Mount Schottky Barrier Rectifiers

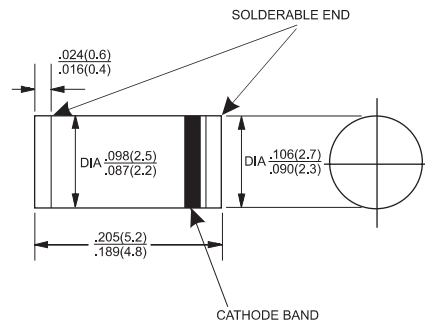


Voltage Range
20 to 40 Volts
Current
1.0 Ampere

Features

- ✧ Surge overload ratings to 25 amperes peak
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ✧ Mounting position: Any
- ✧ Weight: 0.12 gram

MELF



Dimensions in inches and (millimeters)

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%

Type Number	Symbol	LL5817	LL5818	LL5819	Units
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 Rectified Current @ $T_L = 90^\circ\text{C}$	$I_{(AV)}$	1.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	0.450	0.550	0.600	V
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	0.750	0.875	0.900	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	1.0 10			mA mA
Typical Thermal Resistance (Note 1)	$R\theta_{JA}$	80			$^\circ\text{C/W}$
Typical Junction Capacitance (Note 2)	C_j	110			pF
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 125 / - 65 to + 150			$^\circ\text{C}$

Notes: 1. Thermal Resistance Junction to Ambient

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

RATINGS AND CHARACTERISTIC CURVES (LL5817 THRU LL5819)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

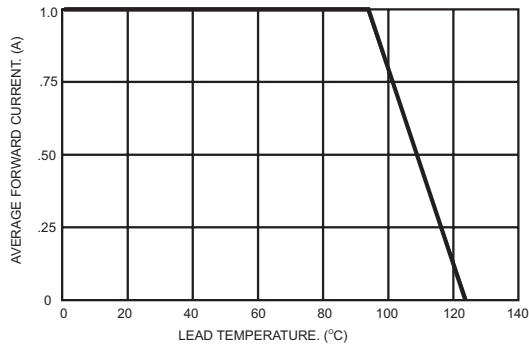


FIG.2- TYPICAL JUNCTION CAPACITANCE

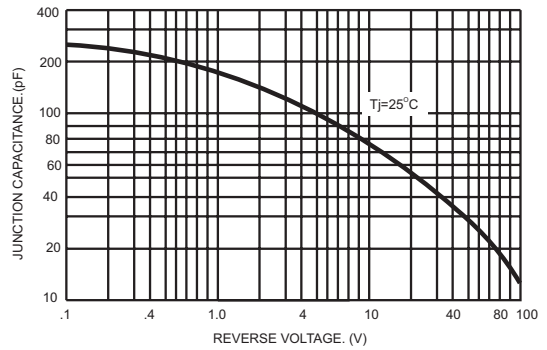


FIG.3- TYPICAL FORWARD CHARACTERISTICS

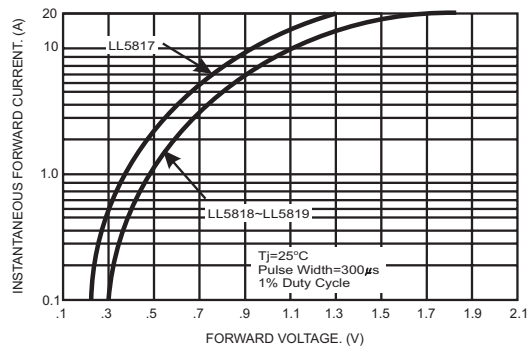


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

