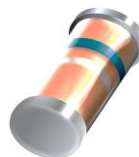


Small Signal Product

Surface Mount Schottky Barrier Rectifiers

FEATURES

- Plastic package has carries underwriters
- Ideal for automated placement
- Surge overload rating to 25 Amperes peak
- Reliable low cost construction utilizing molded plastic technique results in in-expensive product
- High temperature soldering :
260°C/10 seconds at terminals
- Mounting position : Any
- Weight : 0.12 g


MELF


MECHANICAL DATA

- Polarity: Indicated by blue cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	LL5817	LL5818	LL5819	UNIT
Maximum repetitive 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	$I_{F(AV)}$	1			A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	25			A
Maximum instantaneous forward voltage (Note 1) @ 1 A @ 3 A	V_F	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse current @ rated VR $T_J=25^{\circ}\text{C}$ $T_J=100^{\circ}\text{C}$	I_R	0.5 5			mA
Typical junction capacitance (Note 2)	C_j	110			pF
Typical thermal resistance	$R_{\theta JA}$	80			$^{\circ}\text{C/W}$
Operating junction temperature range	T_J	- 65 to +125			$^{\circ}\text{C}$
Storage temperature range	T_{STG}	- 65 to +125			$^{\circ}\text{C}$

Note 1: Pulse test with PW=300μs, 1% duty cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES

($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Fig.1 Maximum Forward Current Derating Curve

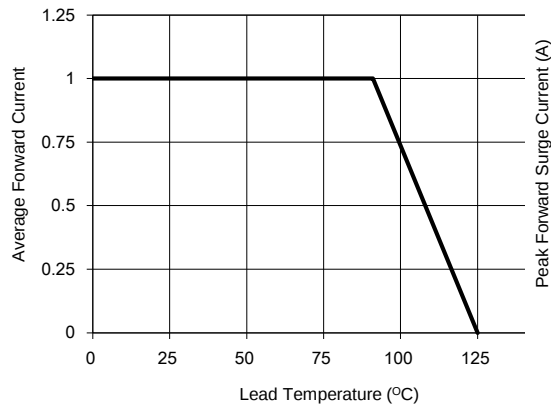


Fig.2 Maximum Non-Repetitive Forward Surge Current

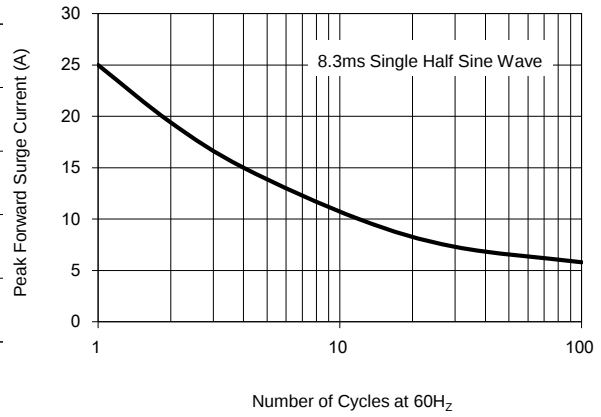


Fig.3 Typical Forward Characteristics

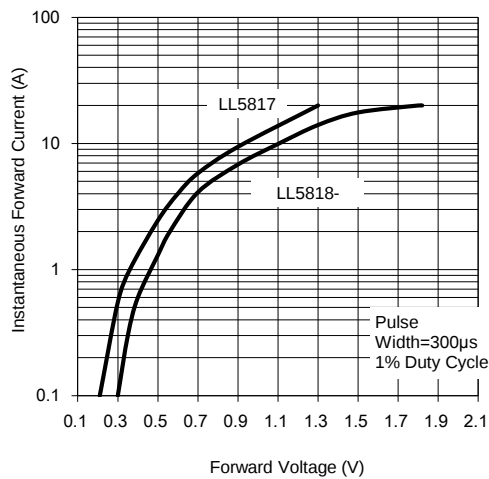


Fig.4 Typical Reverse Characteristics

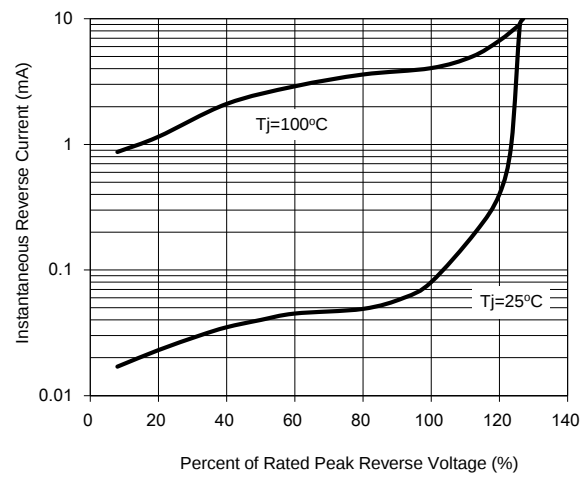


Fig.5 Typical Junction Capacitance

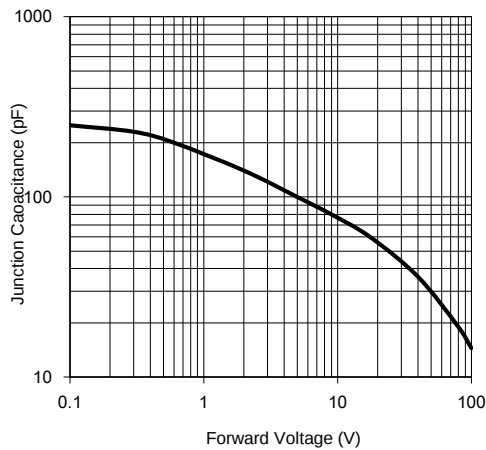
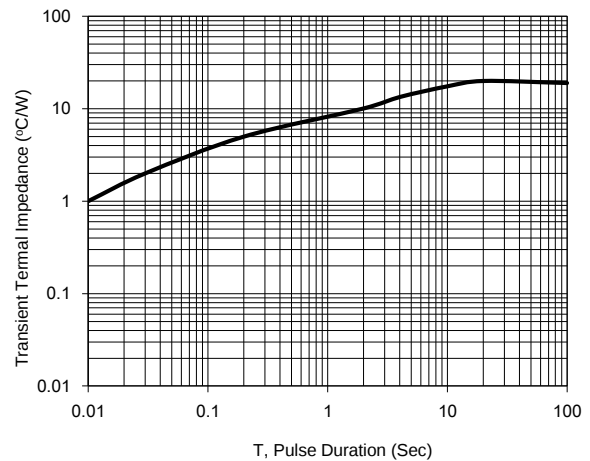


Fig.6 Typical Transient Thermal Characteristics



Small Signal Product

ORDERING INFORMATION

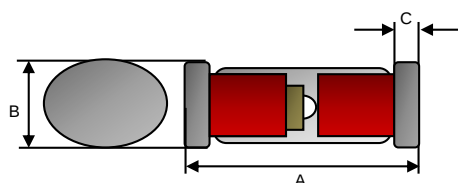
PART NO.	PART NO. SUFFIX (Note 2)	PACKING CODE	PACKAGE	PACKING
LL581x (Note 1)	-xx	L0	MELF	5,000 / 13" Reel

Note 1: "x" defines voltage from 20V (LL5817) to 40V (LL5819)

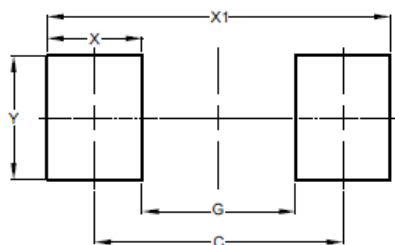
Note 2: Part No. Suffix „-xx “ would be used for special requirement

EXAMPLE

PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	DESCRIPTION
LL5817 L0	LL5817		L0	Multiple manufacturer sources
LL5817-J0 L0		-J0		Defined manufacturer source

PACKAGE OUTLINE DIMENSIONS
MELF


Dimensions	Unit (inch)		Unit (mm)	
	Min	Max	Min	Max
A	0.189	0.217	4.800	5.500
B	0.089	0.105	2.250	2.670
C	0.012	0.024	0.300	0.600

SUGGEST PAD LAYOUT


DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
C	4.80	0.189
G	3.30	0.130
X	1.50	0.059
X1	6.30	0.248
Y	2.70	0.106

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