

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
- Packing code with suffix "G" means
Green compound (Halogen free)


MELF


MECHANICAL DATA

- Polarity: Indicated by blue cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°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 °C T _J =100 °C	I _R	0.5 5			mA
Typical junction capacitance (Note 2)	C _j	110			pF
Typical thermal resistance	R _{θJA}	80			°C/W
Operating junction temperature range	T _J	- 65 to +125			°C
Storage temperature range	T _{STG}	- 65 to +125			°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

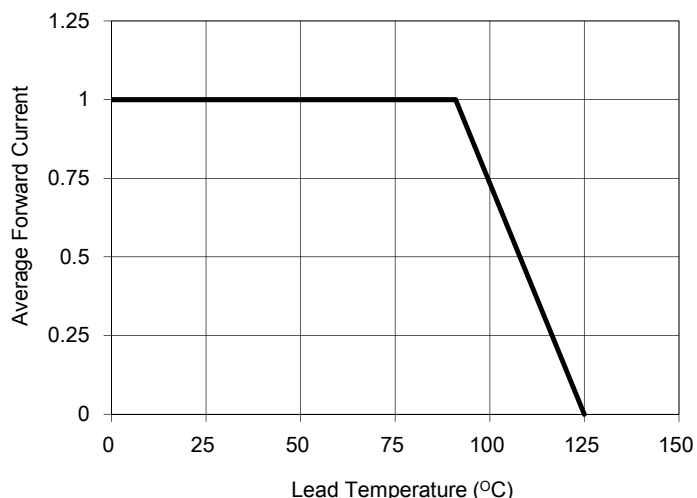


Fig.2 Maximum Non-Repetitive Forward Surge Current

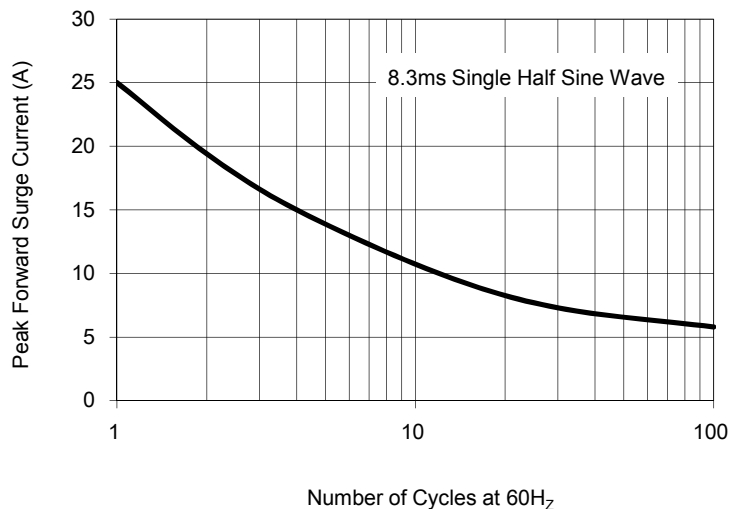


Fig.3 Typical Forward Characteristics

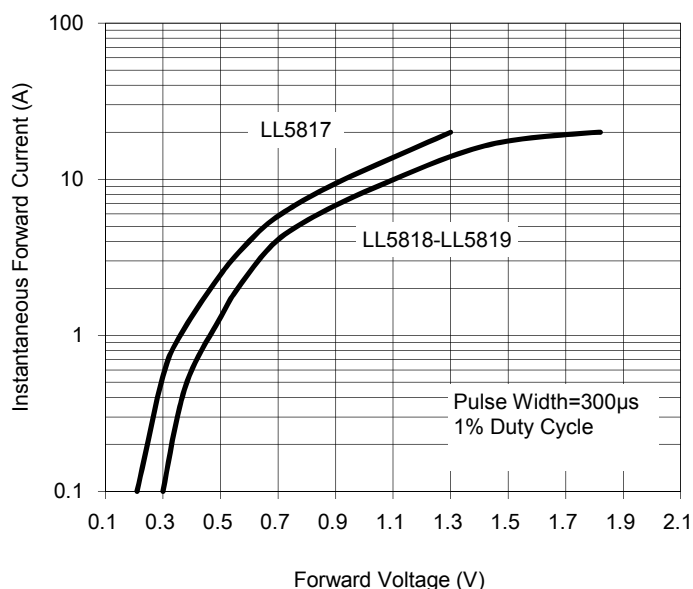


Fig.4 Typical Reverse Characteristics

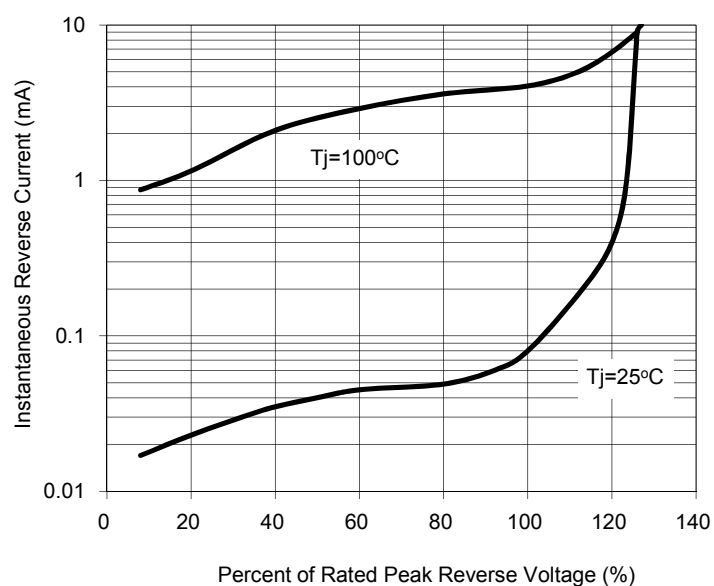


Fig.5 Typical Junction Capacitance

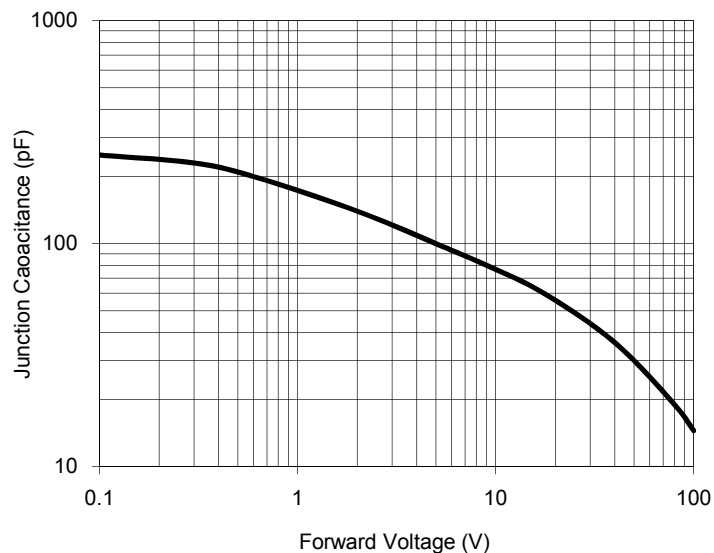
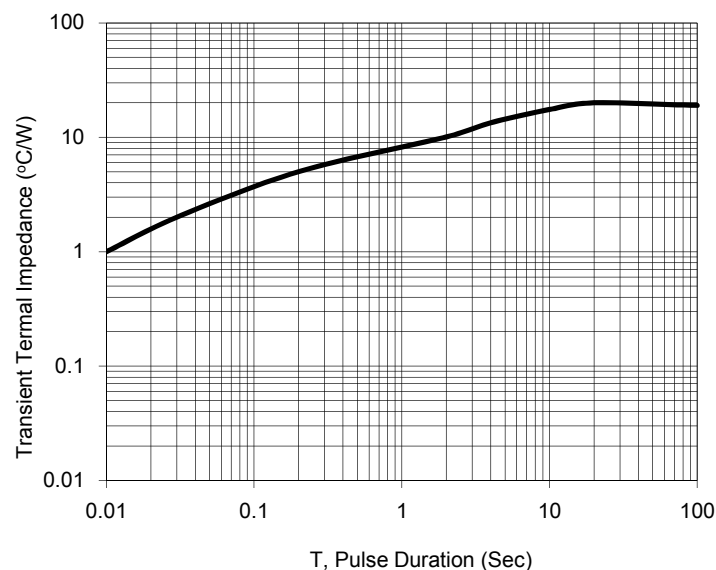


Fig.6 Typical Transient Thermal Characteristics



Small Signal Product

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

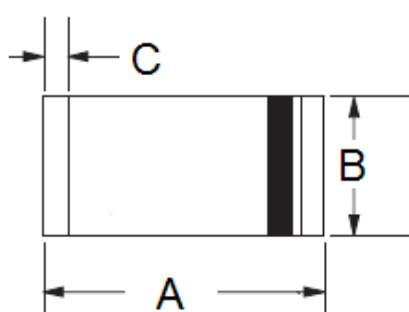
Note 1: "x" defines voltage from 20V (LL5817) to 40V (LL5819)

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

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

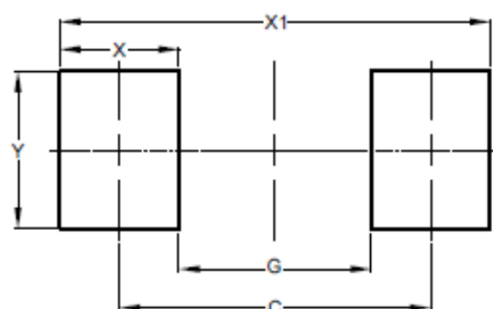
PACKAGE OUTLINE DIMENSIONS

MELF



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.80	5.50	0.189	0.217
B	2.25	2.67	0.089	0.105
C	0.30	0.60	0.012	0.024

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

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Taiwan Semiconductor:](#)

[LL5817](#) [LL5818](#) [LL5819](#)