

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
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Terminal : Pure tin plated, lead free
- Weight : 0.12 grams


MELF


MECHANICAL DATA

- Polarity: Indicated by blue cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)							
PARAMETER	SYMBOL	LSR102	LSR103	LSR104	LSR105	LSR106	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	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	V _F	0.55			0.70		V
Maximum reverse current @ rated VR T _J =25 °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

(TA=25°C unless otherwise noted)

Fig.1 Maximum Forward Current Derating Curve

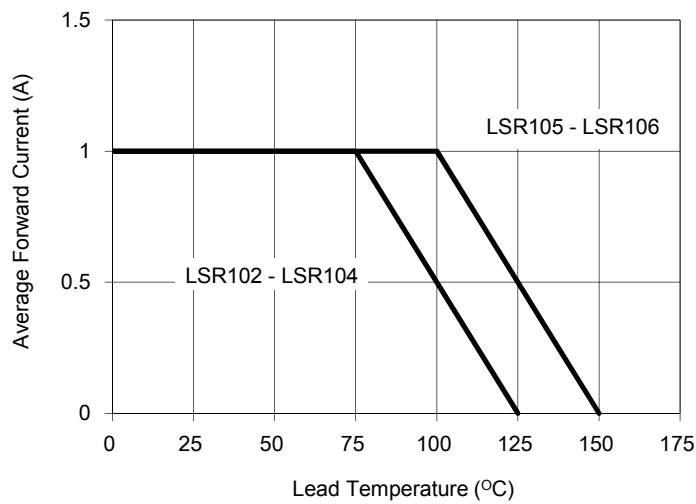


Fig.2 Maximum Non-Repetitive Forward Surge Current

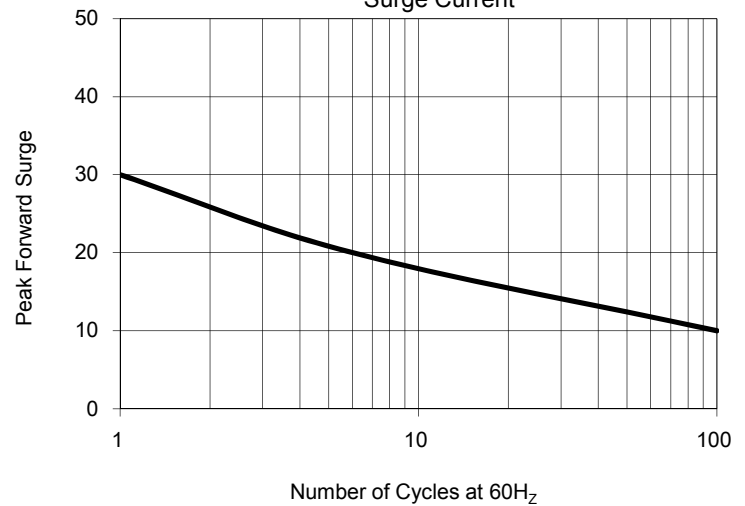


Fig.3 Typical Forward Characteristics

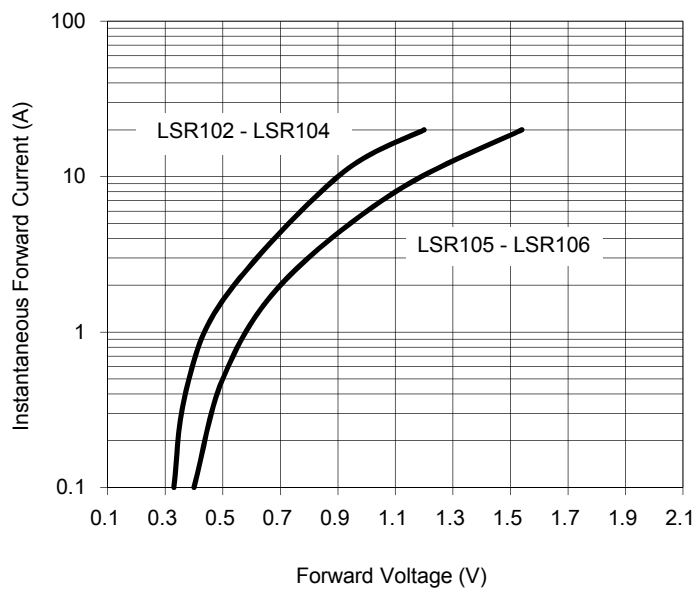


Fig.4 Typical Reverse Characteristics

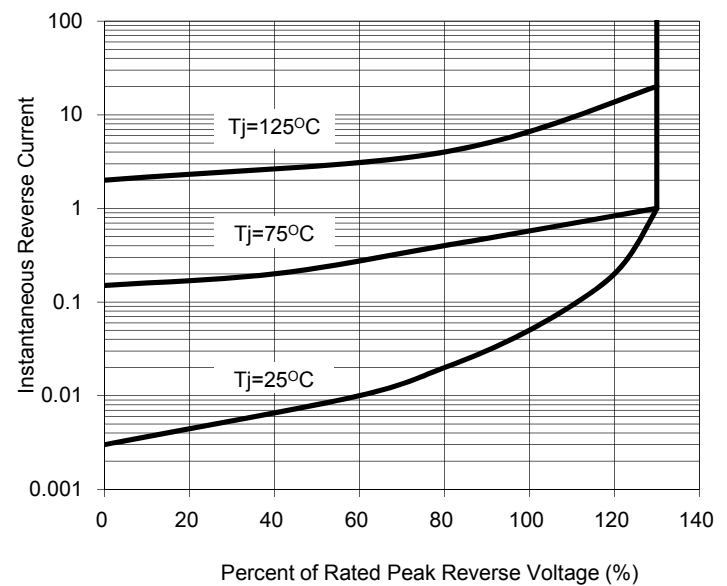


Fig.5 Typical Junction Capacitance

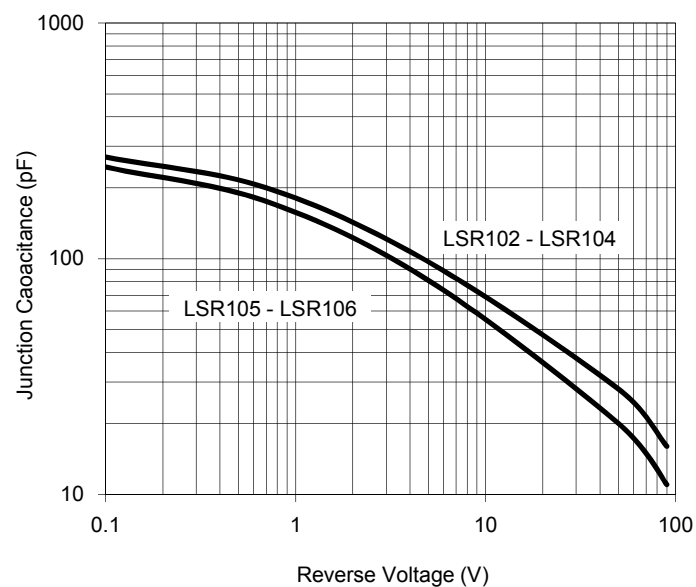
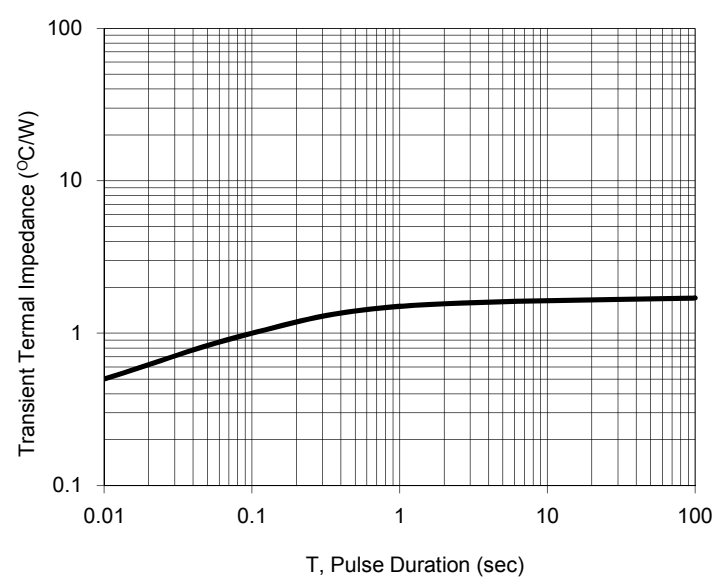


Fig.6 Typical Transient Thermal Characteristics



Small Signal Product

ORDERING INFORMATION

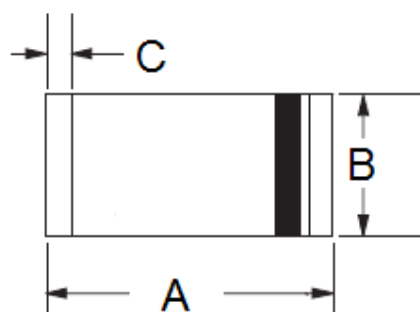
PART NO.	PART NO. SUFFIX (Note 2)	PACKING CODE	PACKAGE	PACKING
LSR10x (Note 1)	-xx	L0	MELF	5K / 13" Reel

Note 1: "x" defines voltage from 20V (LSR102) to 60V (LSR106)

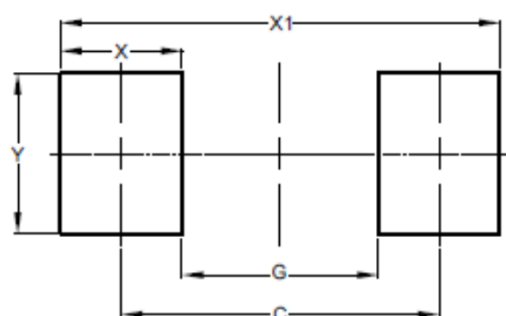
Note 2: Part No. Suffix „-xx “ would be used for special requirement

EXAMPLE

PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	DESCRIPTION
LSR102 L0	LSR102		L0	Multiple manufacture source
LSR102-J0 L0	LSR102	-J0	L0	Define manufacture source

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

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