Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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Small Signal Product

Surface Mount Schottky Barrier Rectifiers

FEATURES

- Plastic package has carries underwriters
- Ideal for automated placement
- Surge overload rating to 25 Ampers 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

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

- Polarity: Indicated by blue cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ 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 T_J=125 °C	I_R	1 10					mA
Typical junction capacitance (Note 2)	Cj	110			80		pF
Typical thermal resistance	$R_{\theta JA}$	80					°C/W
Operating junction temperature range	T_J	-65 to +125			-65 to +150		°C
Storage temperature range	T_{STG}	- 65 to +150					°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.

RATINGS AND CHARACTERISTICS CURVES

(TA=25℃ unless otherwise noted)

Fig.1 Maximum Forward Current Derating Curve

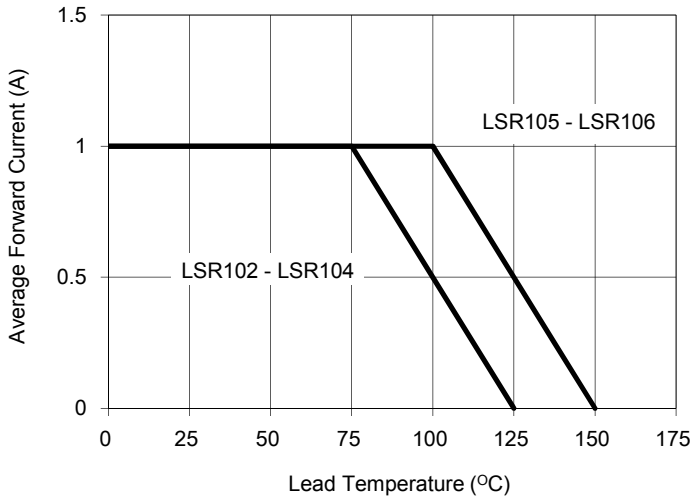


Fig.2 Maximum Non-Repetitive Forward Surge Current

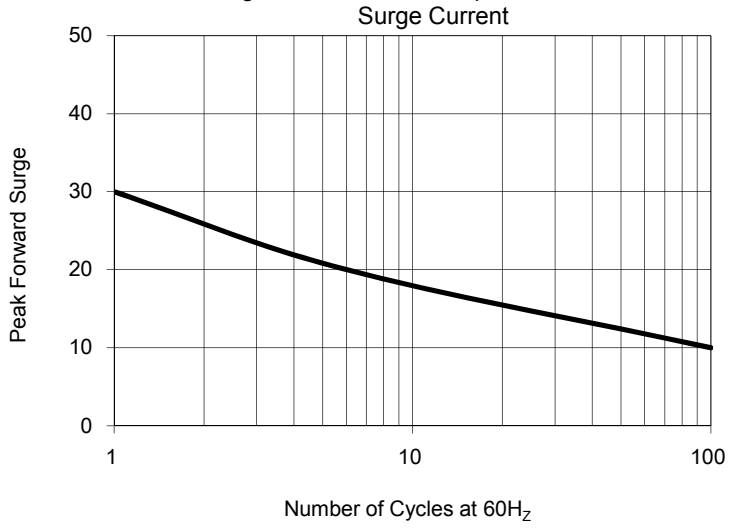


Fig.3 Typical Forward Characteristics

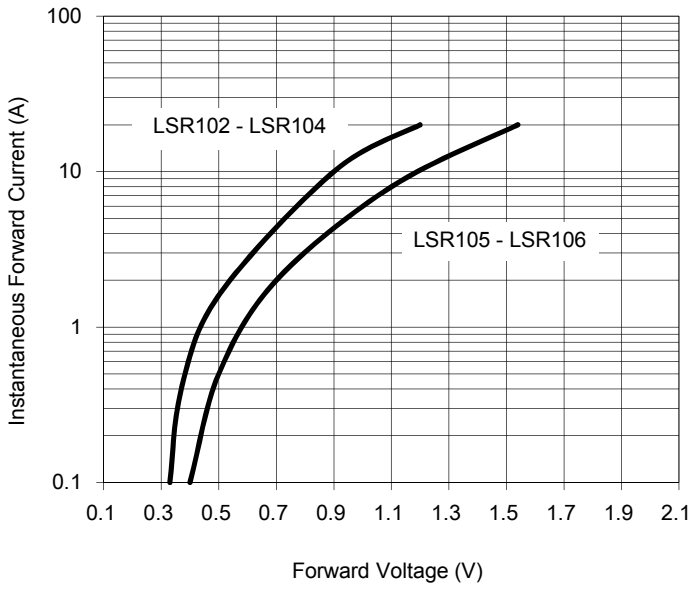


Fig.4 Typical Reverse Characteristics

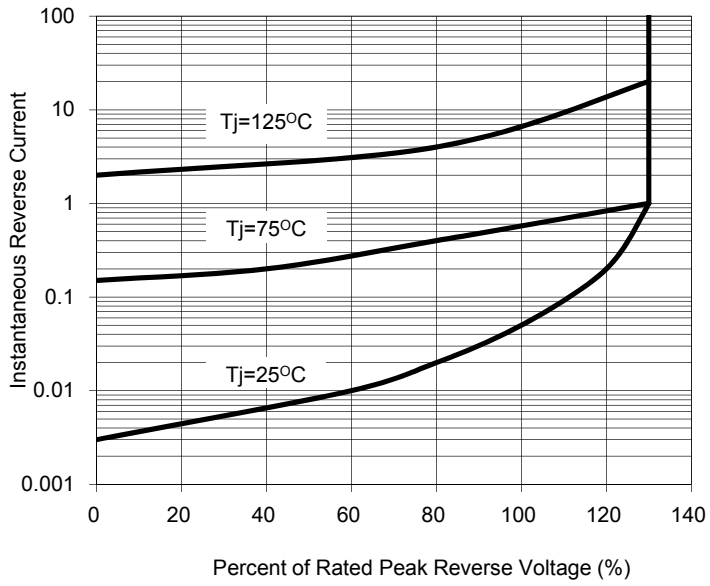


Fig.5 Typical Junction Capacitance

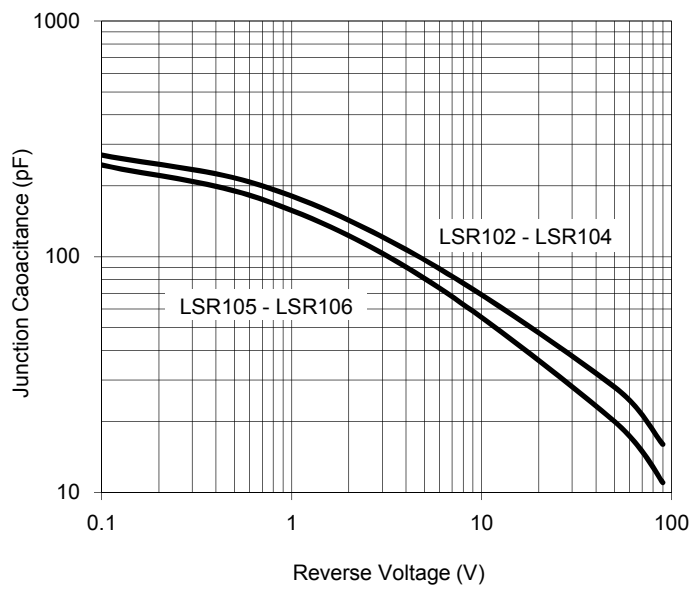
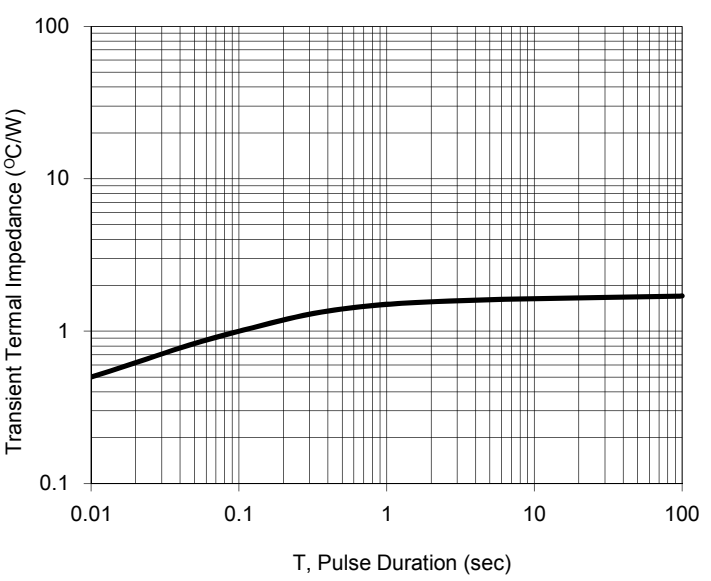


Fig.6 Typical Transient Thermal Characteristics



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

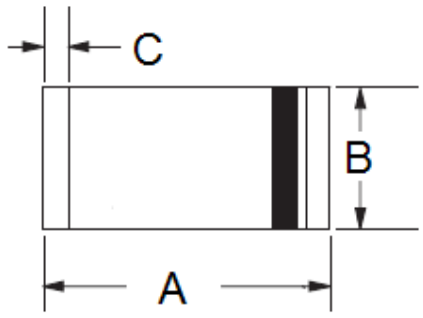
Note 1: "x" defines voltage from 20V (LSR102) to 60V (LSR106)

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

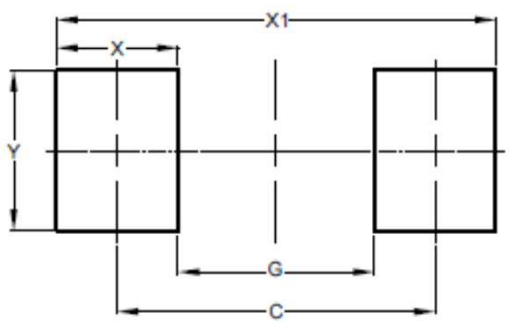
PACKAGE OUTLINE DIMENSIONS

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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