



# LSR102 THRU LSR106

1.0 AMP. Surface Mount Schottky Barrier Rectifiers

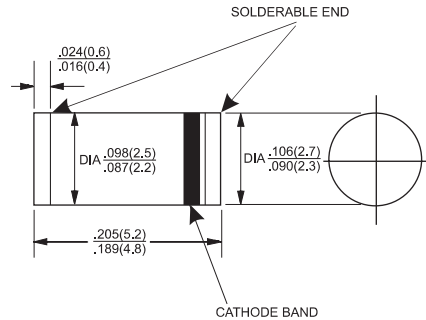


Voltage Range  
20 to 60 Volts  
Current  
1.0 Ampere

## MELF

### Features

- ✧ Surge overload ratings to 40 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



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	LSR102	LSR103	LSR104	LSR105	LSR106	Units
Maximum Recurrent 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 See Fig. 1	$I_{(AV)}$	1.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	30					A
Maximum Instantaneous Forward Voltage @ 1.0A	$V_F$	0.55			0.70		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	$R\theta_{JA}$	15					$^\circ\text{C}/\text{W}$
Typical Junction Capacitance ( Note )	$C_j$	110			80		pF
Operating Temperature Range	$T_J$	- 65 to + 125			- 65 to + 150		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 150					

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

## RATINGS AND CHARACTERISTIC CURVES (LSR102 THRU LSR106)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

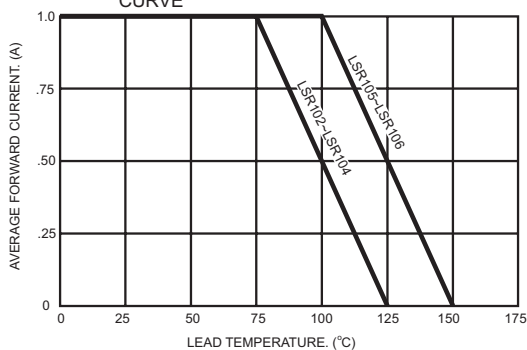


FIG.2- TYPICAL FORWARD CHARACTERISTICS

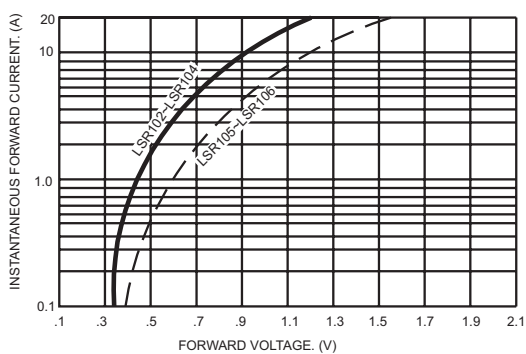


FIG.3- TYPICAL REVERSE CHARACTERISTICS

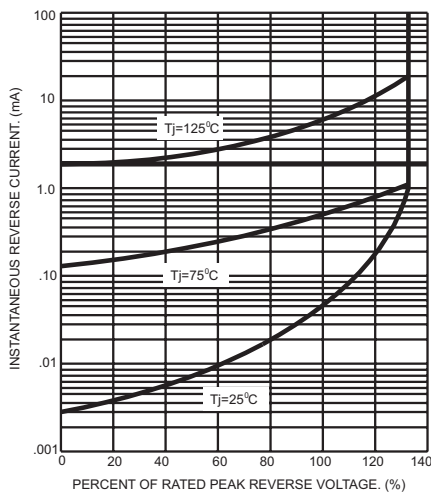


FIG.4- TYPICAL JUNCTION CAPACITANCE

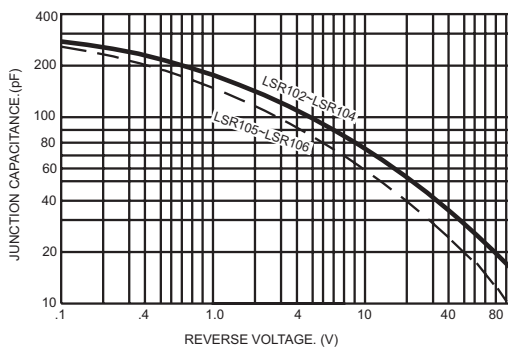


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

