LSR102 THRU LSR106

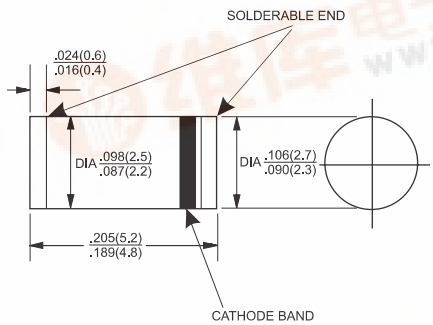
1.0 AMP. Surface Mount Schottky Barrier Rectifiers

Voltage Range
20 to 60 Volts
Current
1.0 Ampere

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

MELF



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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℃ at Rated DC Blocking Voltage @ T_A=100℃	I_R	1.0 10					mA mA
Typical Thermal Resistance	$R\theta_{JA}$	15					℃/W
Typical Junction Capacitance (Note)	Cj	110			80		pF
Operating Temperature Range	T_J	- 65 to + 125			- 65 to + 150		℃
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

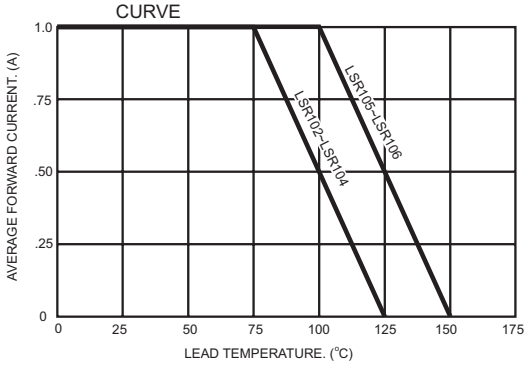


FIG.2- TYPICAL FORWARD CHARACTERISTICS

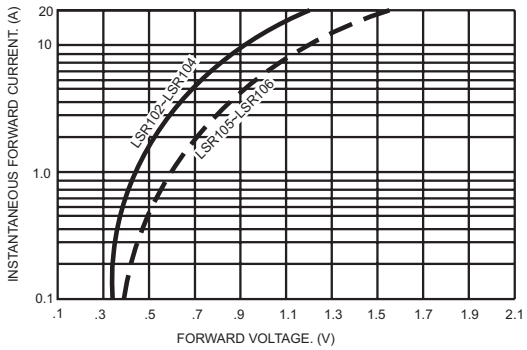


FIG.3- TYPICAL REVERSE CHARACTERISTICS

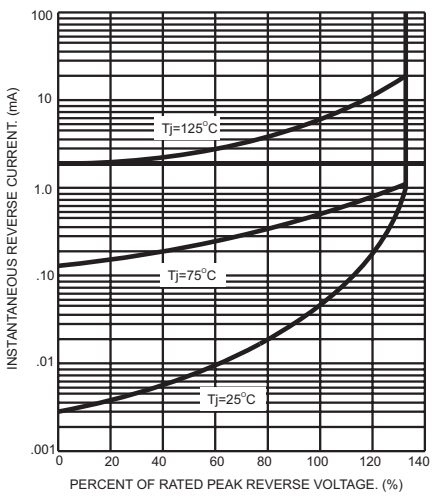


FIG.4- TYPICAL JUNCTION CAPACITANCE

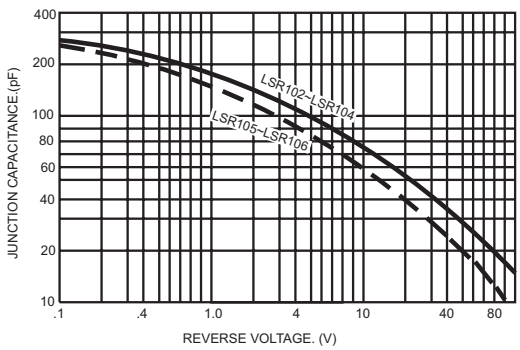


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT