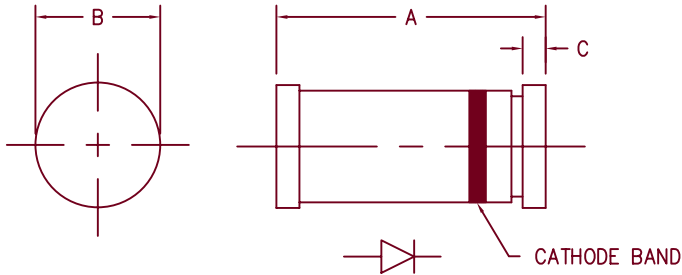


# 1 Amp Schottky Rectifier LSM140 — LSM150



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.189	.205	4.80	5.20	
B	.094	.105	2.39	2.66	Dia.
C	.016	.022	.41	.55	

GLASS HERMETIC D0213AB

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	Device Marking
LSM140	40V	40V	L140
LSM145	45V	45V	L145
LSM150	50V	50V	L150

- Low Forward Voltage
- Schottky Barrier Rectifier
- Guard Ring Protection
- 150°C Junction Temperature
- VRRM 40 to 50 Volts

## Electrical Characteristics

Average forward current	I <sub>F(AV)</sub> 1.0 Amps	T <sub>A</sub> = 124°C, Square wave, R <sub>θJC</sub> = 45°C/W
Maximum surge current	I <sub>FSM</sub> 50 Amps	8.3ms, half sine, T <sub>J</sub> = 150°C
Max peak forward voltage	V <sub>FM</sub> .39 Volts	I <sub>FM</sub> = 0.1A: T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub> .58 Volts	I <sub>FM</sub> = 1.0A: T <sub>J</sub> = 25°C*
Max peak reverse current	I <sub>RM</sub> 1.0 mA	V <sub>RRM, T<sub>J</sub></sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 60pF	V <sub>R</sub> = 5.0V, T <sub>J</sub> = 25°C

\*Pulse test: Pulse width 300 μsec. Duty cycle 2%

## Thermal and Mechanical Characteristics

Storage temperature range	T <sub>STG</sub>	-65°C to 150°C
Operating junction temp range	T <sub>J</sub>	-65°C to 150°C
Typical thermal Resistance	R <sub>θJC</sub>	45°C/W Junction to Case
Weight		.0047 ounces (.012 grams) typical



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05-15-07 Rev. 1

# LSM140 — LSM150

Figure 1  
Maximum Forward Characteristics

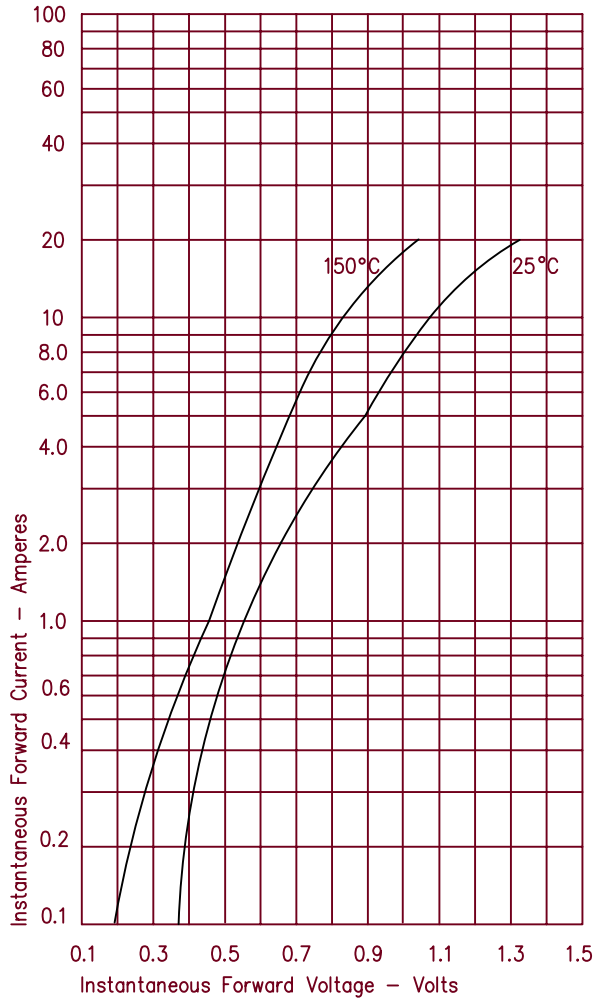


Figure 3  
Typical Junction Capacitance

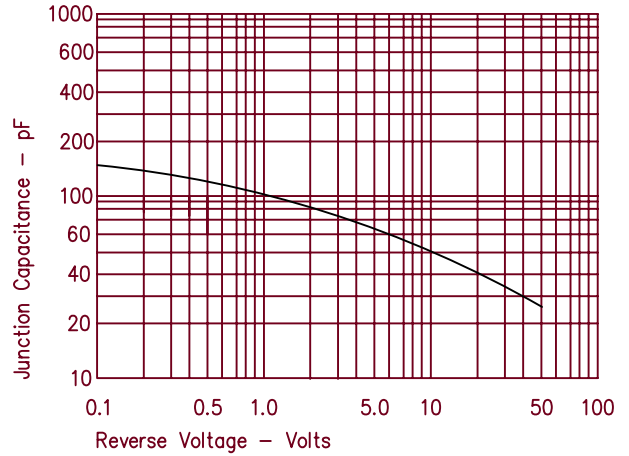


Figure 2  
Typical Reverse Characteristics

