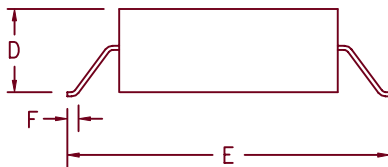
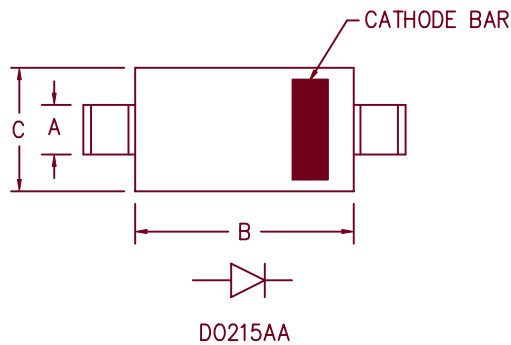


# 1 Amp Schottky Rectifier LSM140G — LSM150G



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.087	2.06	2.21	
B	.160	.180	4.06	4.57	
C	.130	.155	3.30	3.94	
D	.075	.095	1.90	2.41	
E	.270	.290	6.86	7.37	
F	.015	.030	.381	.762	

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	Device Marking
LSM140G	40V	40V	L140
LSM145G	45V	45V	L145
LSM150G	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> = 130°C, Square wave, R <sub>θJC</sub> = 25°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</sub> , T <sub>J</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>	-55°C to 175°C
Operating junction temp range	T <sub>J</sub>	-55°C to 150°C
Typical thermal Resistance	R <sub>θJC</sub>	25°C/W Junction to case
Weight		.0047 ounces (.013 grams) typical

3-31-00 Rev. IR

# LSM140G — LSM150G

Figure 1  
Maximum Forward Characteristics

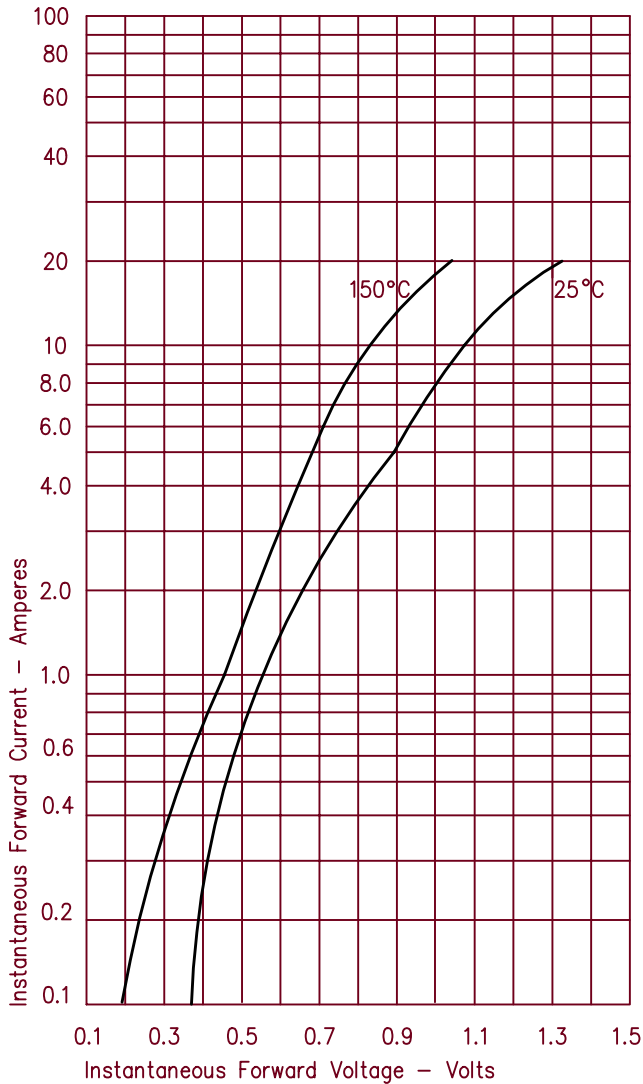


Figure 3  
Typical Junction Capacitance

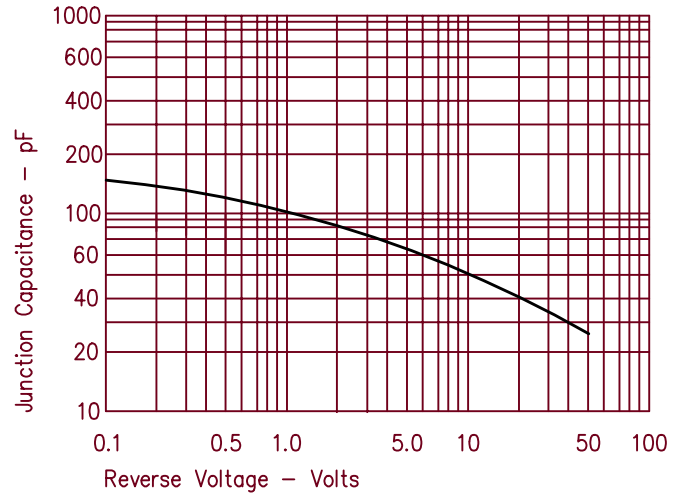


Figure 2  
Typical Reverse Characteristics

