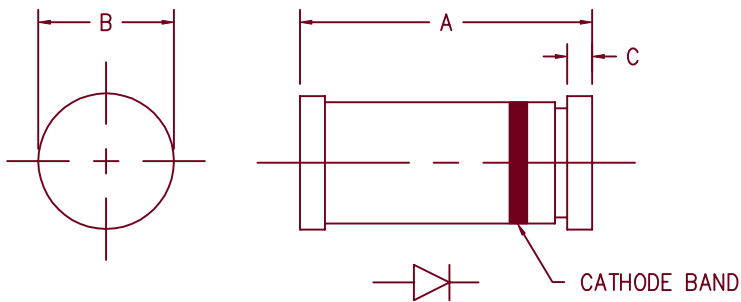


# 1 Amp Schottky Rectifier 5817SM, 5818SM, 5819SM



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
5817SM	20V	20V
5818SM	30V	30V
5819SM	40V	40V

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- High Reliability
- High Current Capability

## Electrical Characteristics

		5817SM	5818SM	5819SM	
Average forward current	I <sub>F(AV)</sub>	1A	1A	1A	Square wave, R <sub>θJEC</sub> = 45 C/W 8.3ms, half sine, T <sub>J</sub> = 150°C I <sub>FM</sub> = 0.1A: T <sub>J</sub> = 25°C * I <sub>FM</sub> = 1.0A: T <sub>J</sub> = 25°C * I <sub>FM</sub> = 3.0A: T <sub>J</sub> = 25°C * V <sub>RRM</sub> , T <sub>J</sub> = 25°C V <sub>R</sub> = 5.0V, T <sub>J</sub> = 25°C
End Cap Temperature		130°C	125°C	125°C	
Maximum surge current	I <sub>FSM</sub>	50A	50A	50A	
Max peak forward voltage	V <sub>FM</sub>	.36V	.39V	.39V	
Max peak forward voltage	V <sub>FM</sub>	.45V	.55V	.55V	
Max peak forward voltage	V <sub>FM</sub>	.65V	.85V	.85V	
Max peak reverse current	I <sub>RM</sub>	1mA	1mA	1mA	
Typical junction capacitance	C <sub>J</sub>	105pF	50pF	50pF	

\*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
Maximum thermal resistance	R <sub>θJEC</sub>	45°C/W Junction to End Cap
Weight		.004 ounces (.012 grams) typical

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# 5817SM

Figure 1  
Typical Forward Characteristics

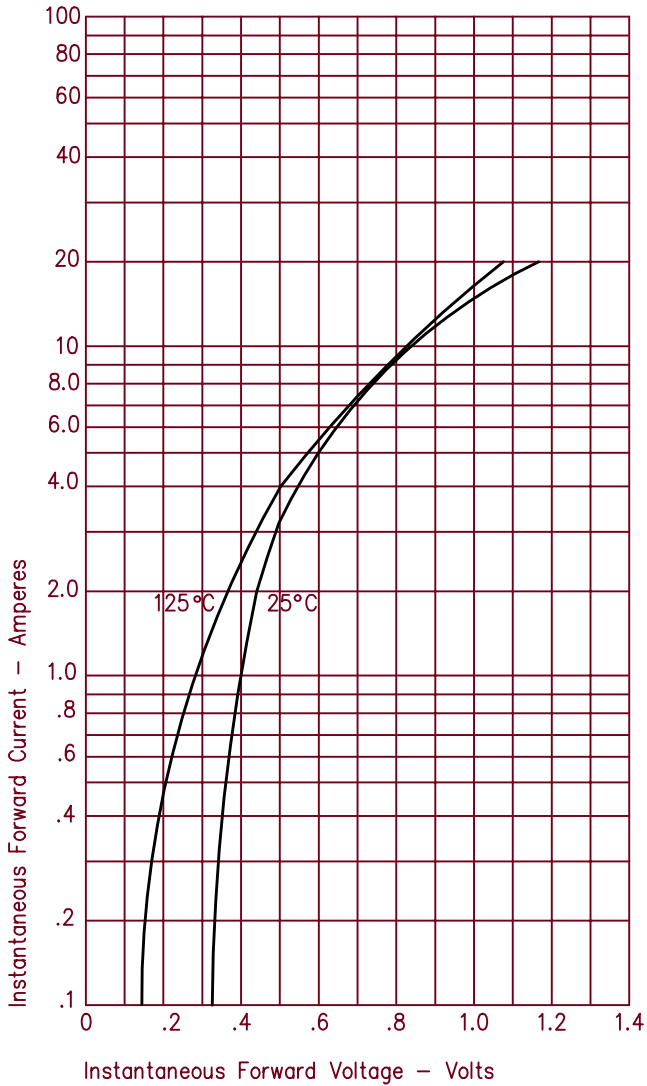


Figure 3  
Typical Junction Capacitance

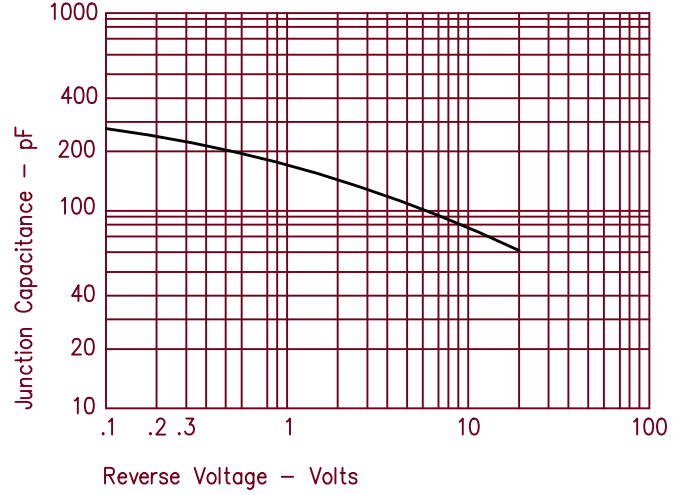
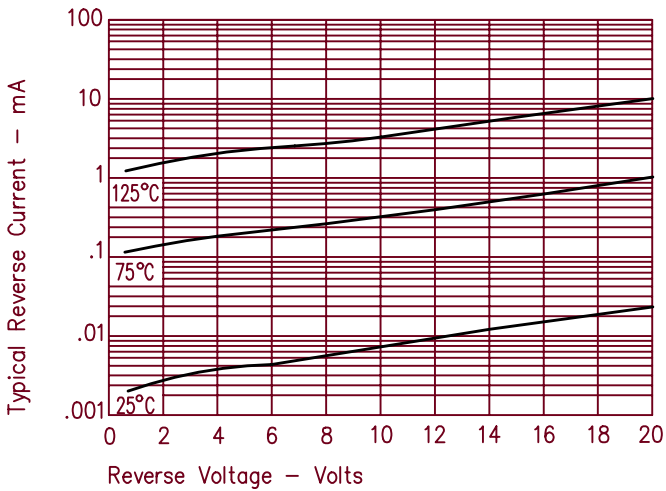


Figure 2  
Typical Reverse Characteristics



# 5818SM & 5819SM

Figure 1  
Typical Forward Characteristics

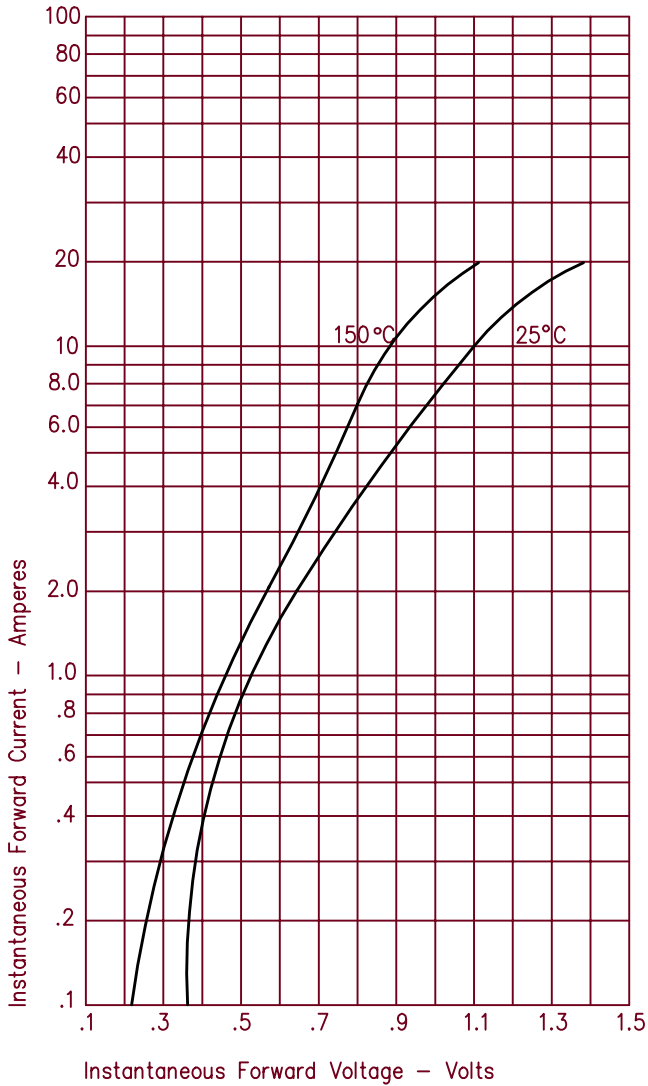


Figure 3  
Typical Junction Capacitance

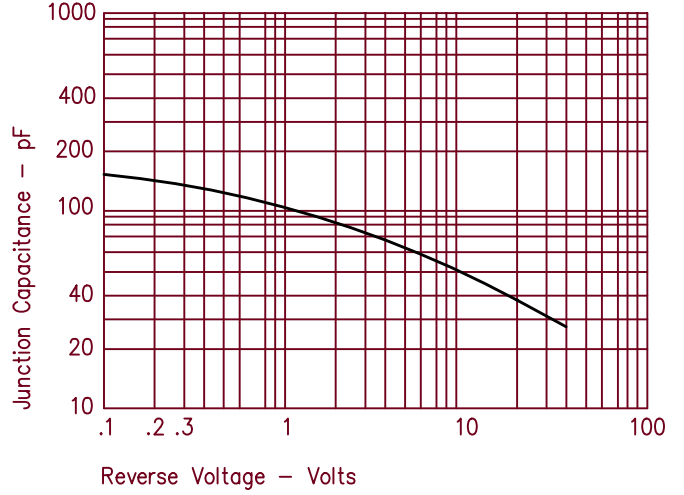


Figure 2  
Typical Reverse Characteristics

