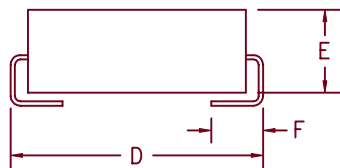
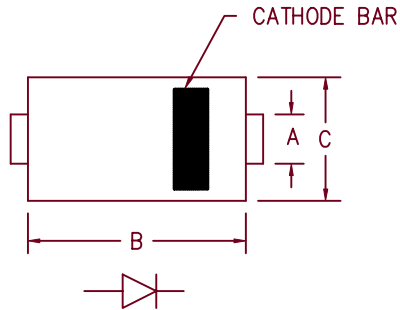


# 1 Amp Schottky Rectifiers 5817SMJ — 5819SMJ



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.073	.087	1.85	2.21	
B	.160	.180	4.06	4.57	
C	.130	.155	3.30	3.94	
D	.205	.220	5.21	5.59	
E	.075	.130	1.91	3.30	
F	.030	.060	.760	1.52	

## DO-214BA Package

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	Device Marking
5817SMJ	20V	20V	5817
5818SMJ	30V	30V	5818
5819SMJ	40V	40V	5819

- Underwriters Laboratory Flammability Class 94V-0
- Schottky Barrier Rectifier
- Guard ring protection
- Low forward voltage
- Low thermal resistance rating

## Electrical Characteristics

		5817SMJ	5818SMJ	5819SMJ	
Average forward current	I <sub>F(AV)</sub>	1A	1A	1A	Square wave
Lead temperature	T <sub>L</sub>	117°C	118°C	118°C	R <sub>θJC</sub> = 15°C/W
Maximum surge current	I <sub>FSM</sub>	50A	50A	50A	8.3ms, half sine, T <sub>J</sub> = 150°C
Max peak forward voltage	V <sub>FM</sub>	.32V	.37V	.37V	I <sub>FM</sub> = 0.1A; T <sub>J</sub> = 25°C *
Max peak forward voltage	V <sub>FM</sub>	.45V	.55V	.55V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C *
Max peak forward voltage	V <sub>FM</sub>	.65V	.85V	.85V	I <sub>FM</sub> = 3.0A; T <sub>J</sub> = 25°C *
Max peak reverse current	I <sub>RM</sub>	1mA	1mA	1mA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub>	105pF	50pF	50pF	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 150°C
Operating junction temp range	T <sub>J</sub>	-55°C to 150°C
Maximum thermal resistance	R <sub>θJC</sub>	15°C/W Junction to lead
Weight		.0047 ounces (.013 grams) typical

3-13-00 Rev. 2

# 5817SMJ

Figure 1  
Typical Forward Characteristics

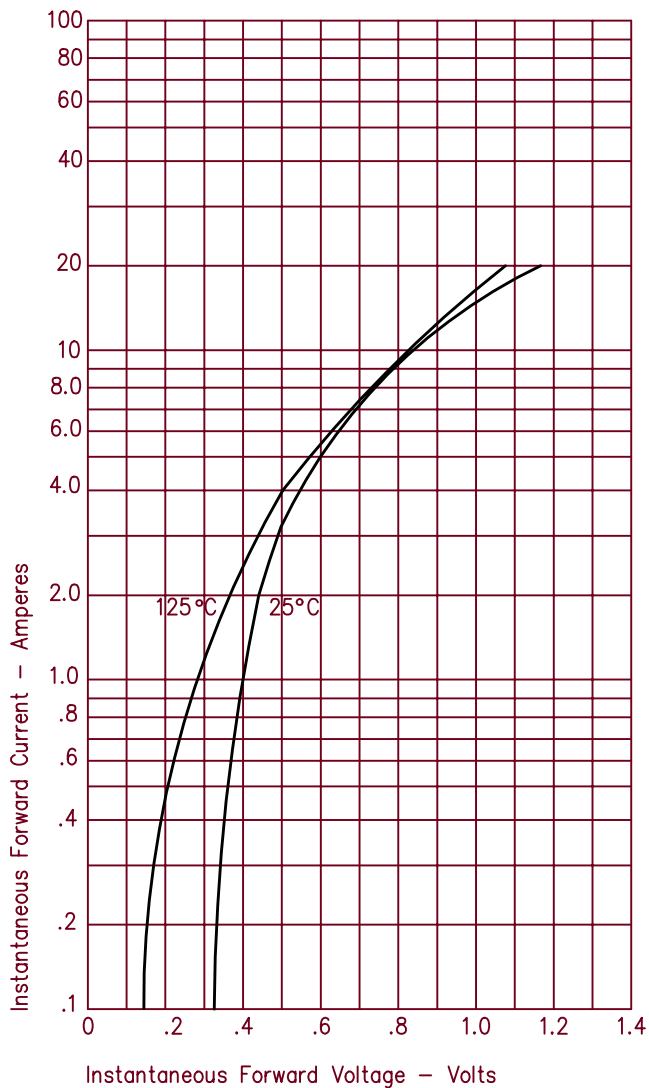


Figure 3  
Typical Junction Capacitance

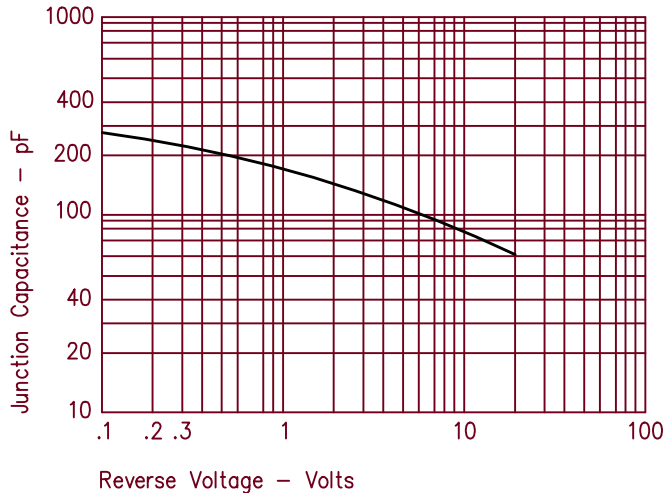
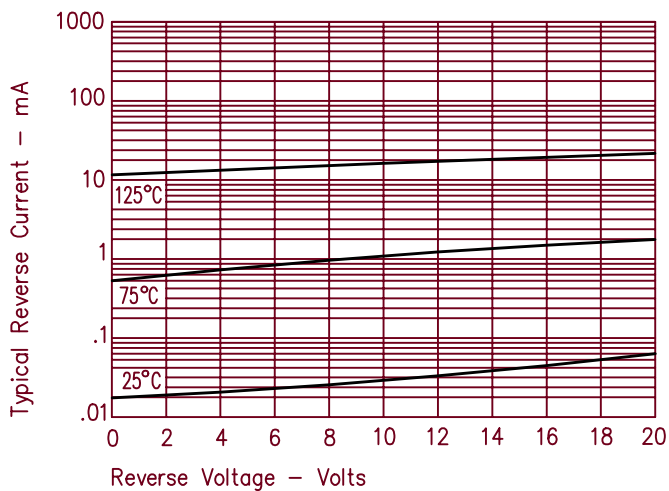


Figure 2  
Typical Reverse Characteristics



# 5818SMJ & 5819SMJ

Figure 1  
Typical Forward Characteristics

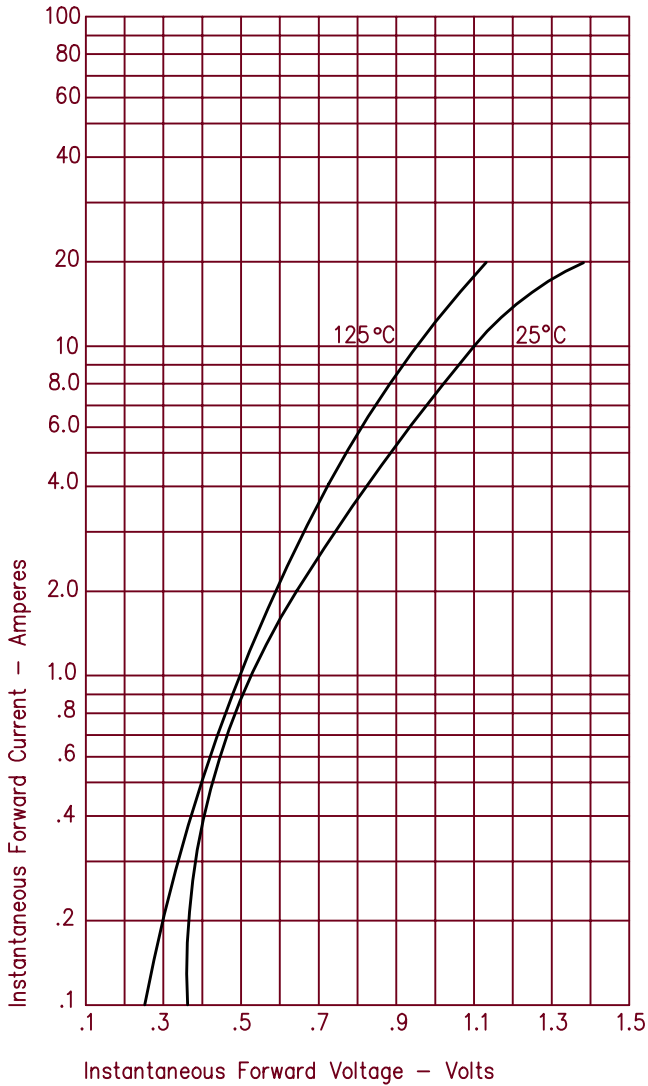


Figure 3  
Typical Junction Capacitance

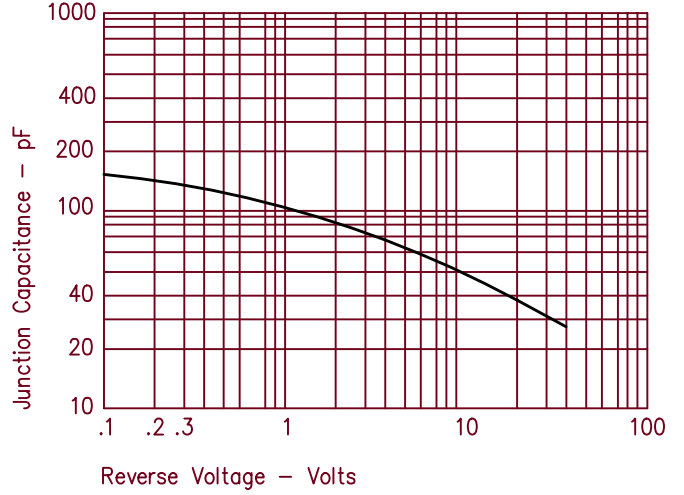


Figure 2  
Typical Reverse Characteristics

