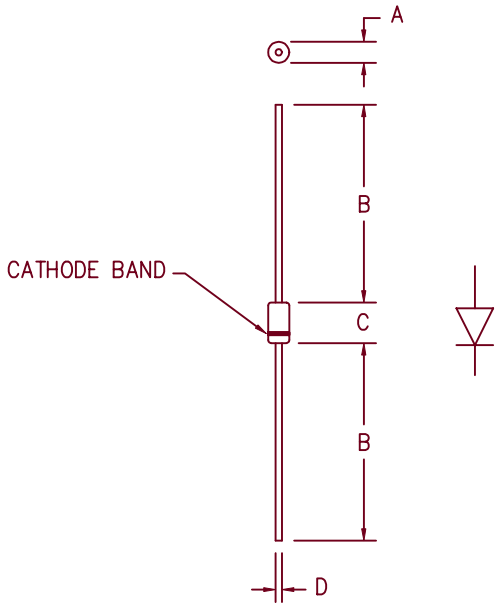


# 1 Amp Schottky Rectifier

## 1N5817G, 1N5818G, 1N5819G



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.107	2.057	2.718	Dia.
B	1.10	---	27.94	---	
C	.160	.205	4.064	5.207	
D	.028	.034	.711	.864	Dia.

GLASS HERMETIC D041

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
1N5817G	20V	20V
1N5818G	30V	30V
1N5819G	40V	40V

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

### Electrical Characteristics

		5817G	5818G	5819G	
Average forward current	I <sub>F(AV)</sub>	1A	1A	1A	R <sub>θJL</sub> = 15°C/W, L = 1/4" 8.3ms, half sine, T <sub>J</sub> = 150°C
Ambient Temperature		135°C	130°C	130°C	
Maximum surge current	I <sub>FSM</sub>	50A	50A	50A	I <sub>FM</sub> = 0.1A: T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub>	.36V	.39V	.39V	I <sub>FM</sub> = 1.0A: T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub>	.45V	.55V	.55V	I <sub>FM</sub> = 3.0A: T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub>	.65V	.85V	.85V	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Max peak forward voltage	I <sub>RM</sub>	1mA	1mA	1mA	V <sub>R</sub> = 5.0V, T <sub>J</sub> = 25°C
Max peak reverse current	C <sub>J</sub>	105pF	50pF	50pF	
Typical junction capacitance					

\*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	L = 1/4" R <sub>θJL</sub>	15°C/W
Weight		.012 ounces (0.38 grams) typical

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# 1N5818G & 1N5819G

Figure 1  
Typical Forward Characteristics

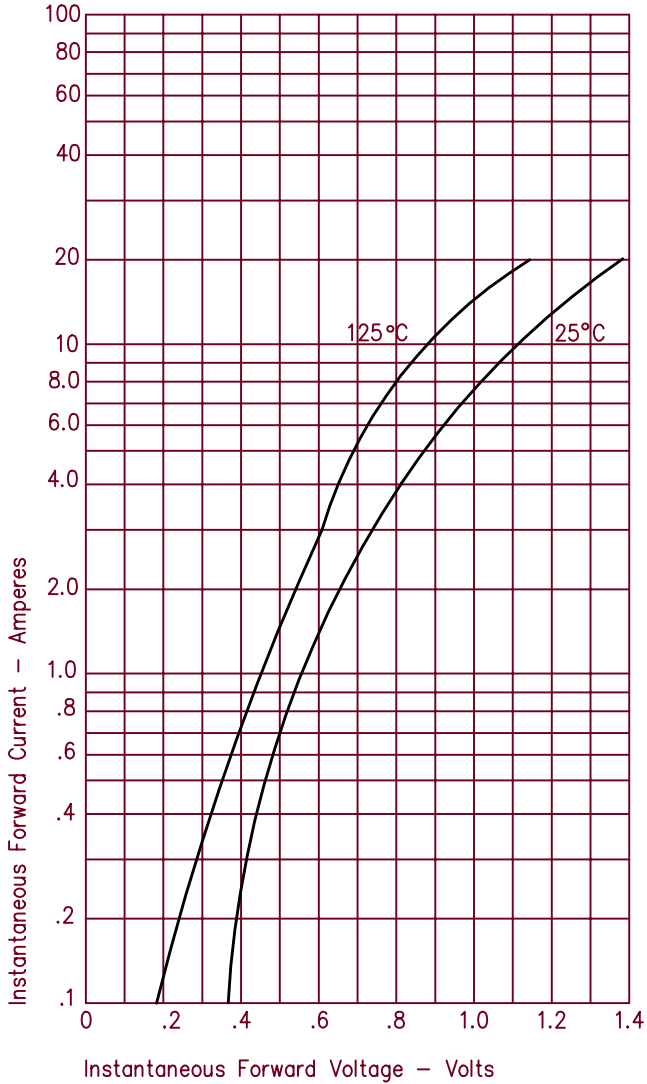


Figure 3  
Typical Junction Capacitance

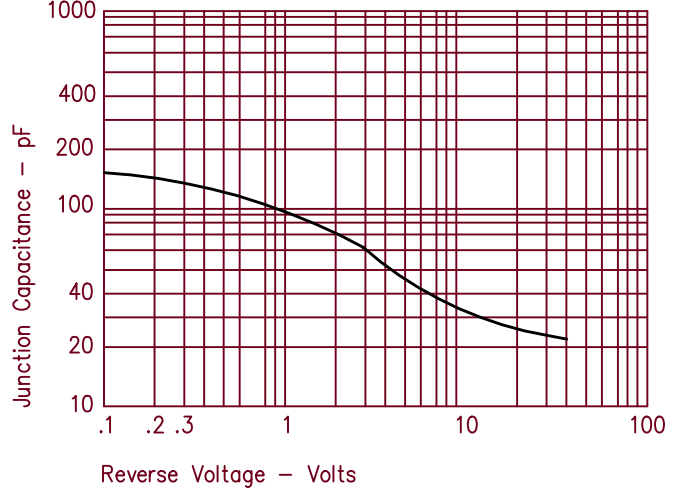
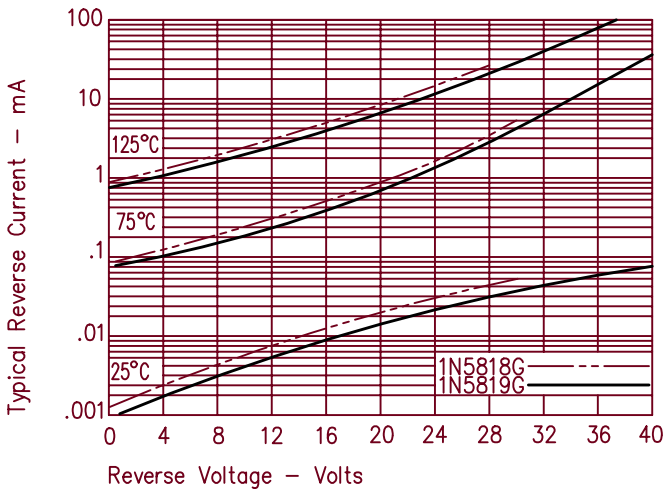


Figure 2  
Typical Reverse Characteristics



# 1N5817G

Figure 1  
Typical Forward Characteristics

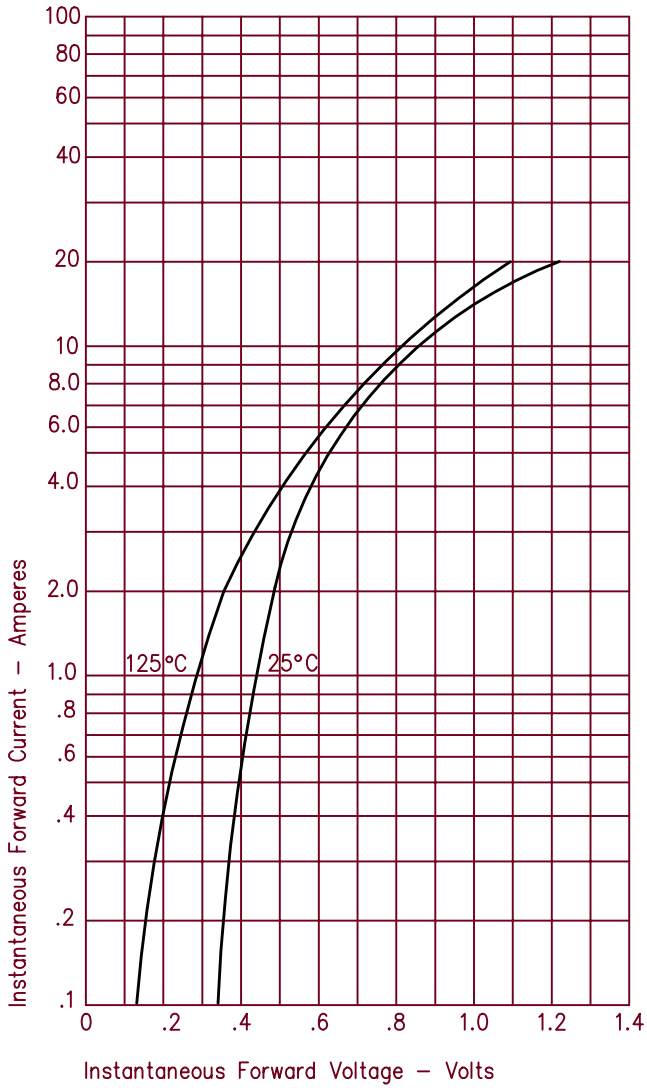


Figure 3  
Typical Junction Capacitance

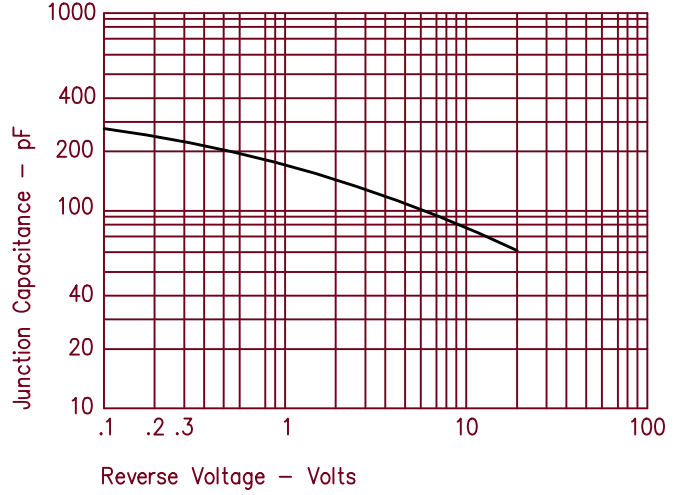


Figure 2  
Typical Reverse Characteristics

