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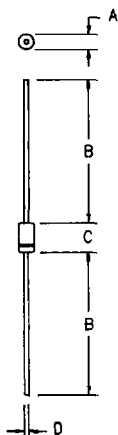
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Jameco Part Number 177949

# 1 Amp Schottky Rectifier

## 1N5817, 1N5818, 1N5819

C



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.

PLASTIC D041

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
1N5817	20V	20V
1N5818	30V	30V
1N5819	40V	40V

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

### Electrical Characteristics

		1N5817	1N5818	1N5819	
Average forward current	I <sub>F(AV)</sub>	1A	1A	1A	
Ambient Temperature		135°C	130°C	130°C	R <sub>θJL</sub> = 35°C/W, L = 0"
Ambient Temperature		120°C	112°C	112°C	R <sub>θJL</sub> = 68°C/W, L = 3/8"
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>	-40°C to 150°C
Operating junction temp range		T <sub>J</sub>	-40°C to 150°C
Maximum thermal resistance	L = 3/8"	R <sub>θJL</sub>	68°C/W
	L = 0	R <sub>θJL</sub>	35°C/W
Weight			.011 ounces (0.34 grams) typical

**Microsemi Corp.**  
**Colorado**

# 1N5817

Figure 1  
Typical Forward Characteristics

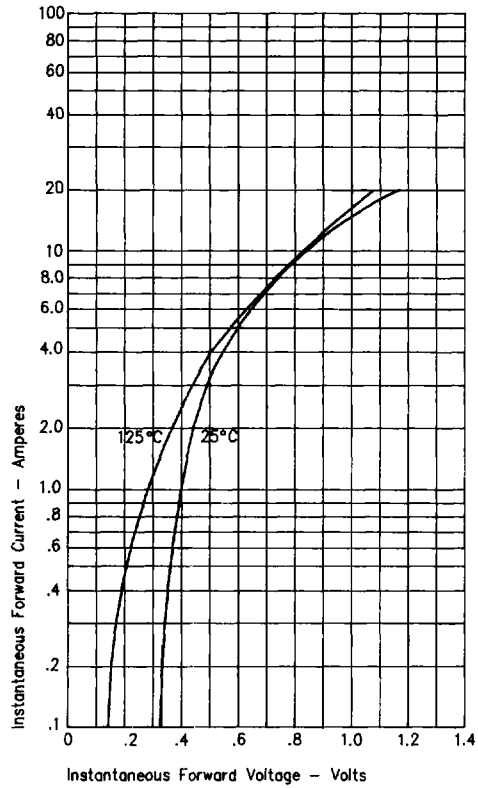


Figure 3  
Typical Junction Capacitance

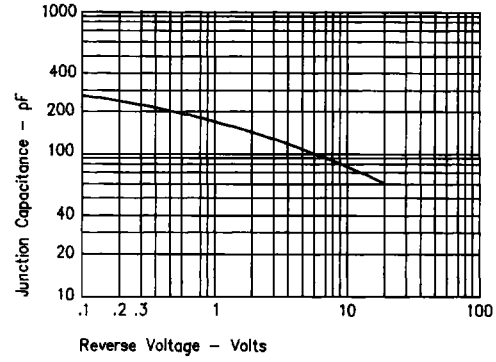
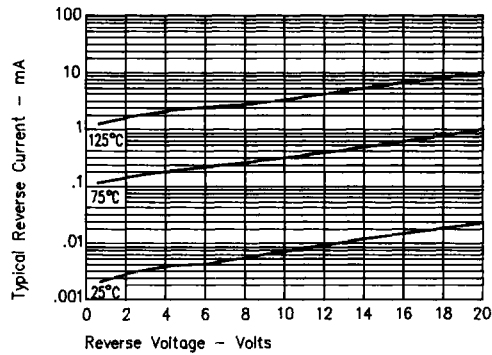


Figure 2  
Typical Reverse Characteristics



# 1N5818 & 1N5819



Figure 1  
Typical Forward Characteristics

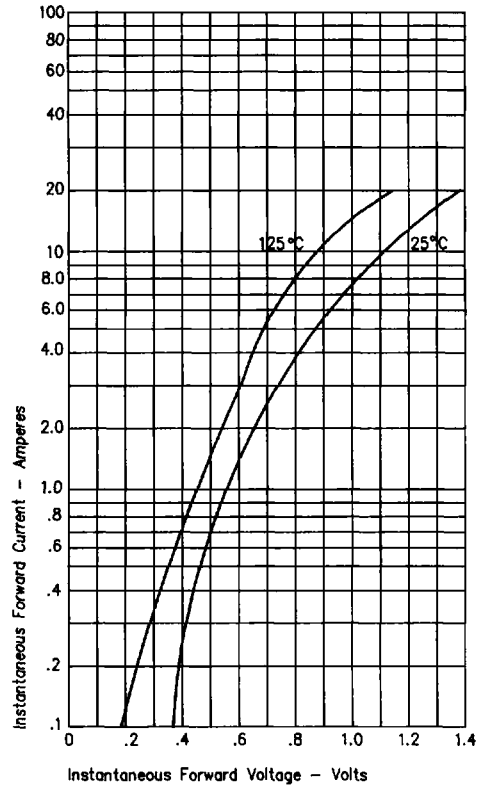


Figure 3  
Typical Junction Capacitance

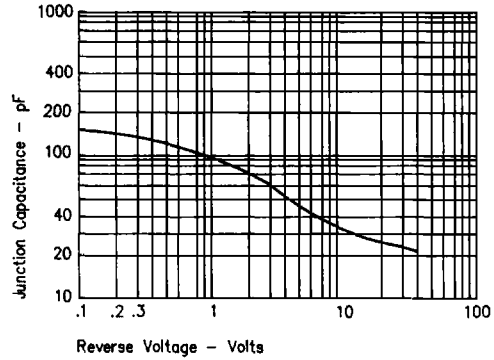


Figure 2  
Typical Reverse Characteristics

