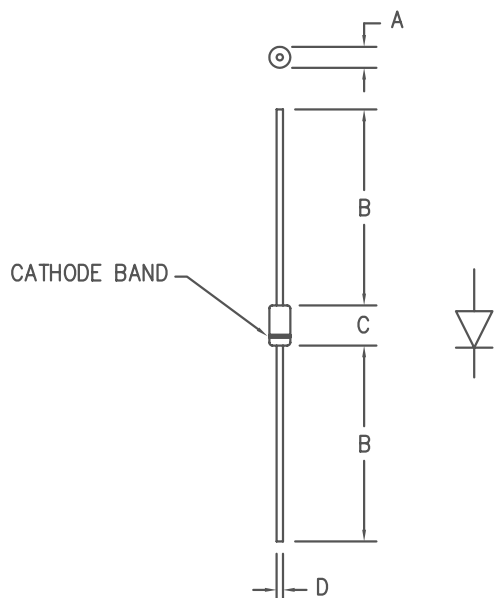


# 1 Amp Schottky Rectifier

## 1N5817, 1N5818, 1N5819



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	Industrial Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
1N5817	VSK120	20V	20V
1N5818	VSK130	30V	30V
1N5819	VSK140	40V	40V

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

### Electrical Characteristics

		1N5817	1N5818	1N5819	
Average forward current	$I_F(AV)$	1A	1A	1A	$R_{\theta JL} = 25^\circ C/W, L = 1/4"$ 8.3ms, half sine, $T_J = 150^\circ C$ $I_{FM} = 0.1A: T_J = 25^\circ C^*$ $I_{FM} = 1.0A: T_J = 25^\circ C^*$ $I_{FM} = 3.0A: T_J = 25^\circ C^*$ $V_{RRM}, T_J = 25^\circ C$ $V_R = 5.0V, T_J = 25^\circ C$
Lead Temperature		128°C	125°C	123°C	
Maximum surge current	$I_{FSM}$	50A	50A	50A	
Max peak forward voltage	$V_{FM}$	.32V	.37V	.37V	
Max peak forward voltage	$V_{FM}$	.45V	.55V	.55V	
Max peak forward voltage	$V_{FM}$	.65V	.85V	.85V	
Max peak reverse current	$I_{RM}$	1mA	1mA	1mA	
Typical junction capacitance	$C_J$	105pF	50pF	50pF	

\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	-55°C to 150°C
Operating junction temp range	$T_J$	-55°C to 150°C
Maximum thermal resistance	$L = 1/4"$ $R_{\theta JL}$	25°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

7-12-04 Rev. 5

# 1N5817

Figure 1  
Typical Forward Characteristics

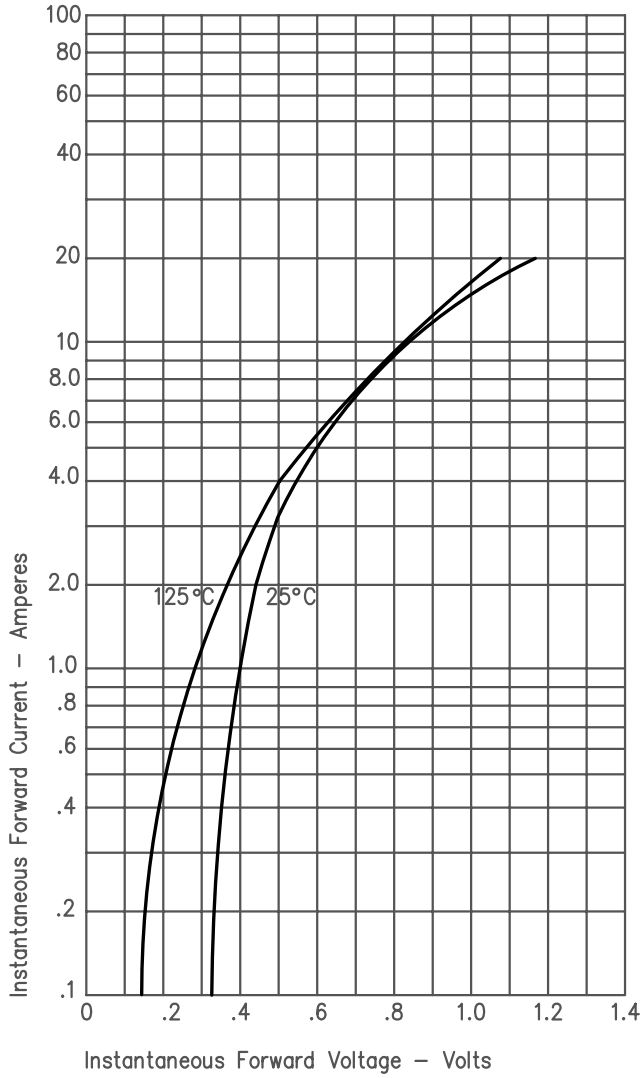


Figure 3  
Typical Junction Capacitance

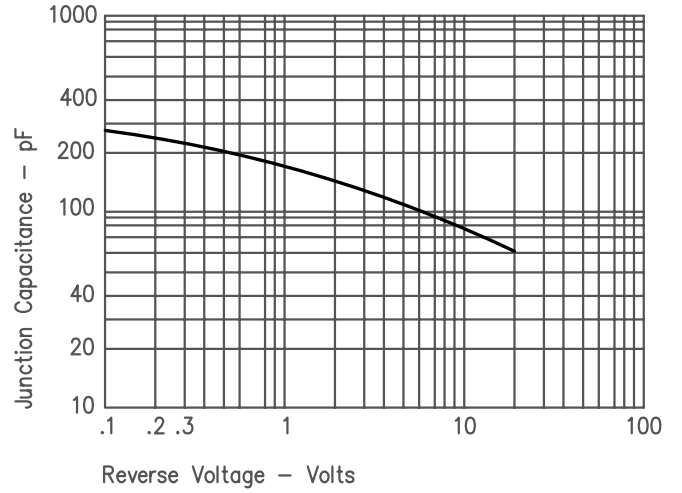
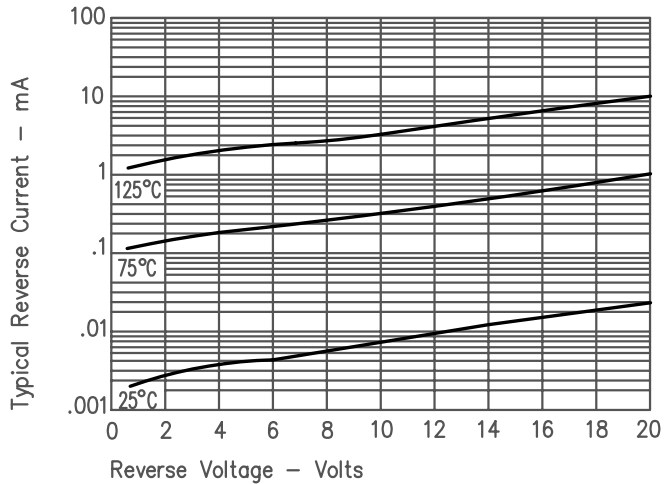


Figure 2  
Typical Reverse Characteristics



# 1N5818 & 1N5819

Figure 1  
Typical Forward Characteristics

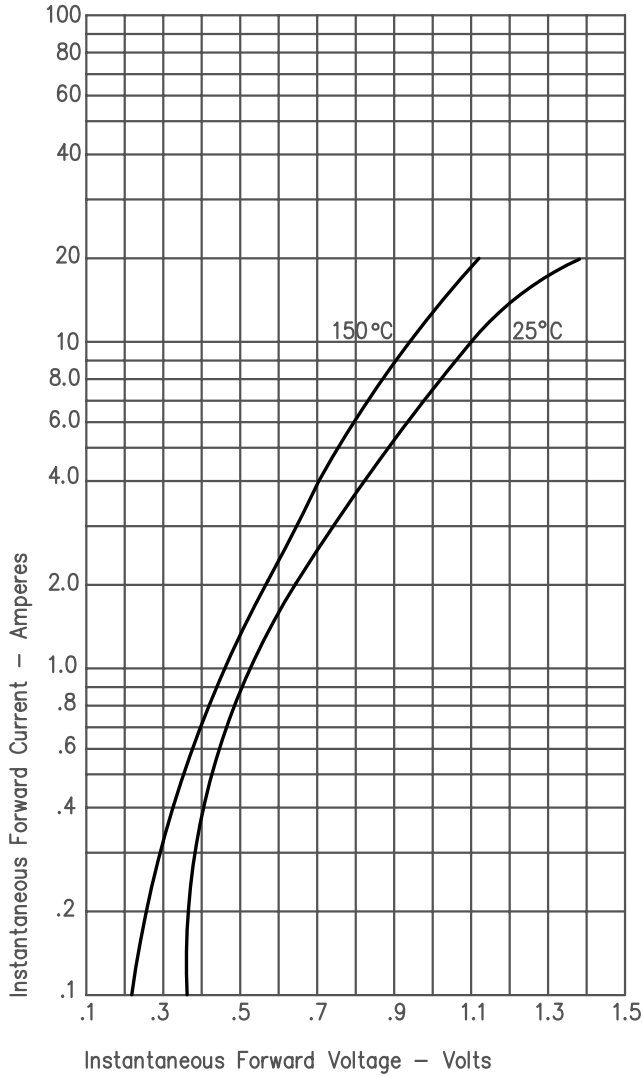


Figure 3  
Typical Junction Capacitance

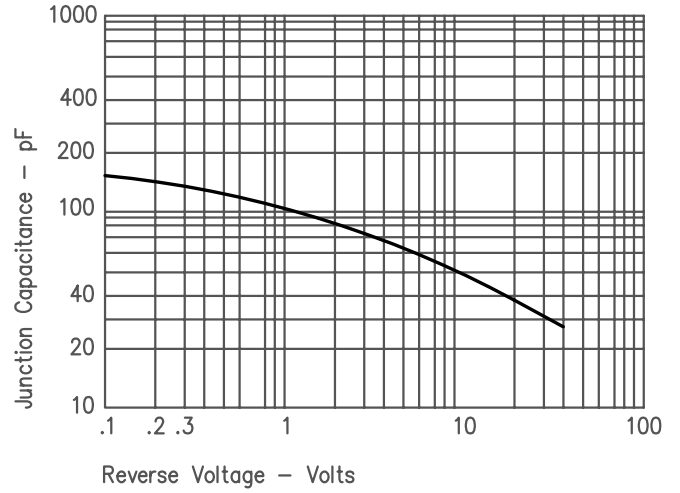


Figure 2  
Typical Reverse Characteristics

