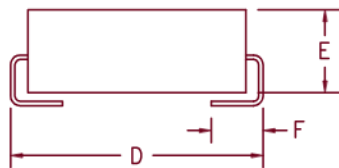
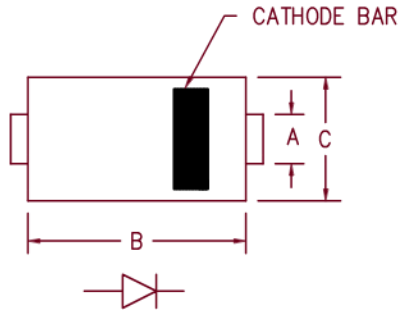


1 Amp Schottky Rectifiers 5817SMJ — 5819SMJ



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 _{F(AV)}	1A	1A	1A	Square wave
Lead temperature	T _L	117°C	118°C	118°C	R _{θJC} = 15°C/W
Maximum surge current	I _{FSM}	50A	50A	50A	8.3ms, half sine, T _J = 150°C
Max peak forward voltage	V _{FM}	.32V	.37V	.37V	I _{FM} = 0.1A; T _J = 25°C *
Max peak forward voltage	V _{FM}	.45V	.55V	.55V	I _{FM} = 1.0A; T _J = 25°C *
Max peak forward voltage	V _{FM}	.65V	.85V	.85V	I _{FM} = 3.0A; T _J = 25°C *
Max peak reverse current	I _{RM}	1mA	1mA	1mA	V _{RRM, T_J} = 25°C
Typical junction capacitance	C _J	105pF	50pF	50pF	V _R = 5.0V, T _J = 25°C

*Pulse test: Pulse width 300 μsec, 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	R _{θJC}	15°C/W Junction to lead
Weight		.0047 ounces (.013 grams) typical

3-13-00 Rev. 2

5817SMJ

Figure 1
Typical Forward Characteristics

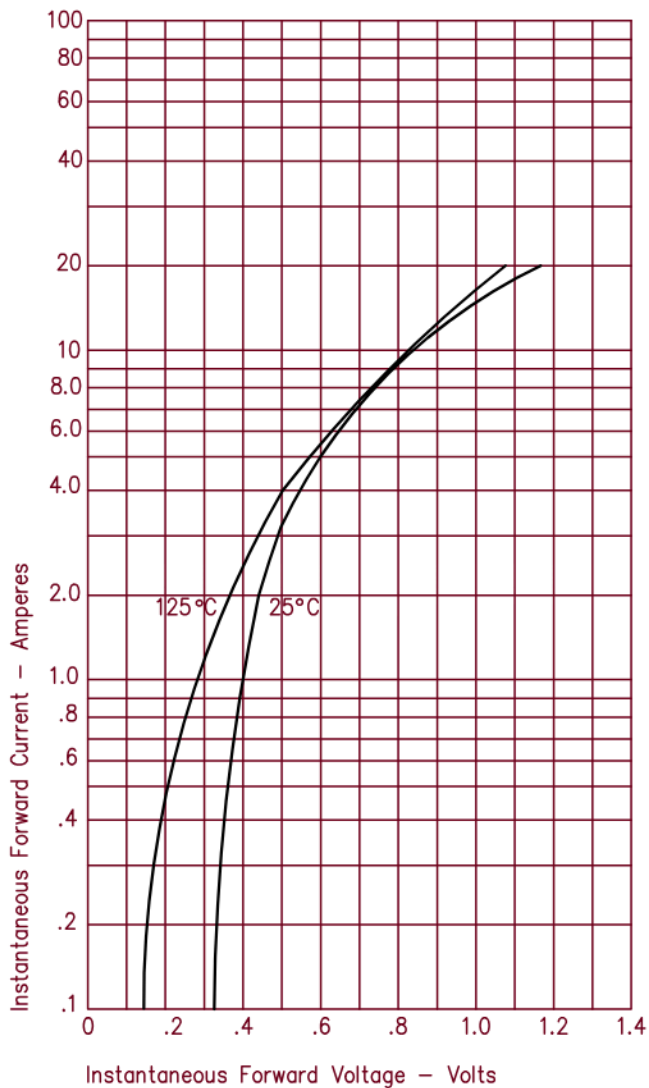


Figure 3
Typical Junction Capacitance

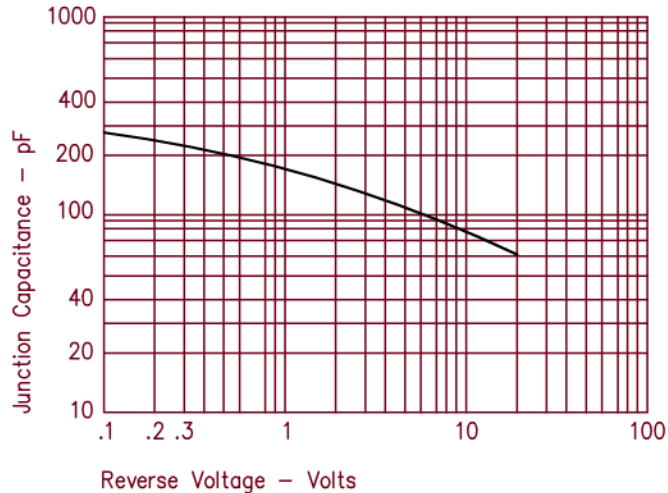
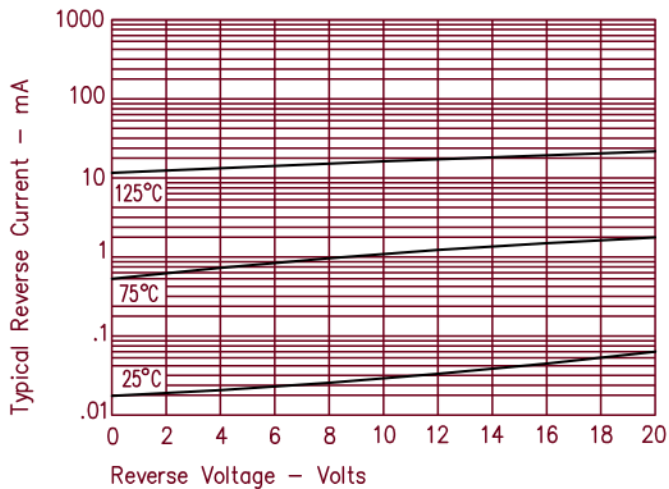


Figure 2
Typical Reverse Characteristics



5818SMJ & 5819SMJ

Figure 1
Typical Forward Characteristics

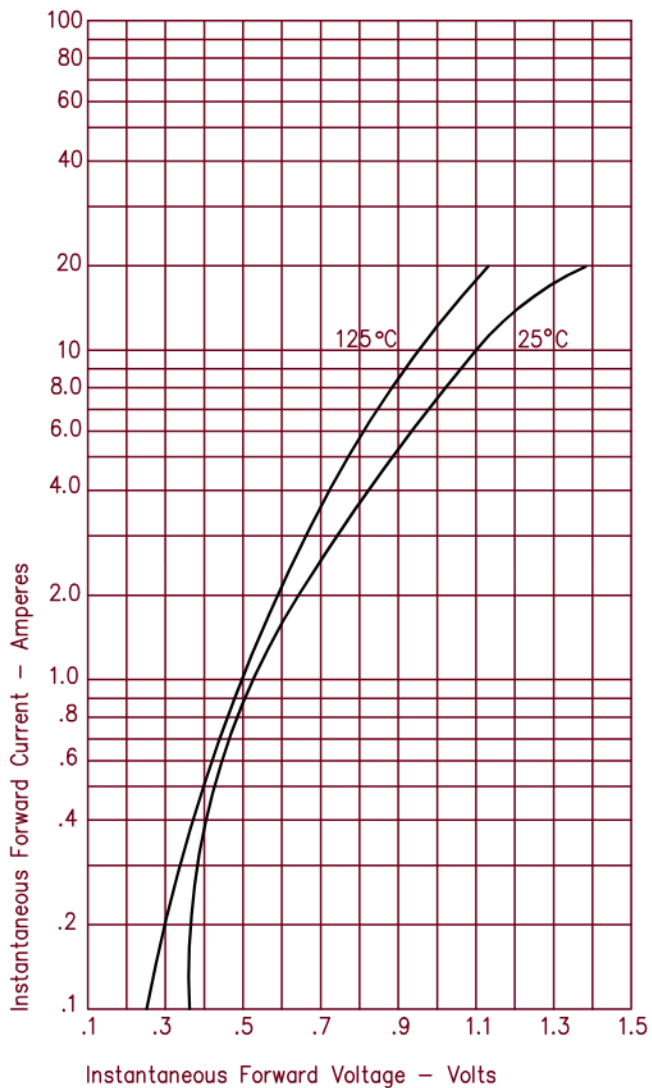


Figure 3
Typical Junction Capacitance

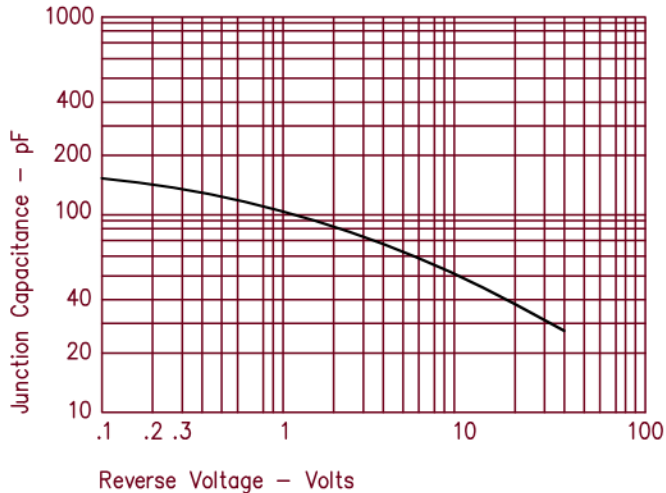


Figure 2
Typical Reverse Characteristics

