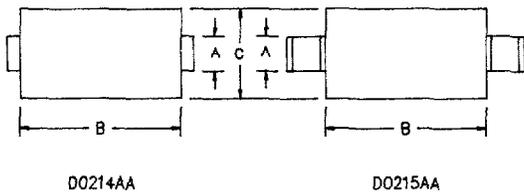
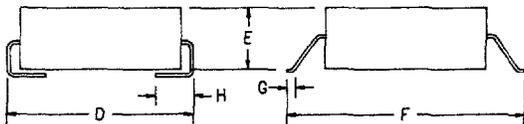


1 Amp Schottky Rectifier 5817SM — 5819SM



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.087	2.06	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	.095	1.90	2.41	
F	.270	.290	6.86	7.37	
G	.015	.030	.381	.762	
H	.030	.060	.760	1.52	



Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
5817SM*	20V	20V
5818SM*	30V	30V
5819SM*	40V	40V

*Add Suffix J For J Lead or G For Gull Wing Lead Configuration

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

Electrical Characteristics					
		1N5817SMP	1N5818SMP	1N5819SMP	
Average forward current	I _{F(AV)}	1A	1A	1A	Square wave
Ambient Temperature		136°C	133°C	133°C	R _{θJC} = 30°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	230pF	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}	-40°C to 150°C
Operating junction temp range	T _J	-40°C to 150°C
Maximum thermal resistance	R _{θJC}	30°C/W Junction to case
Weight		.0047 ounces (.013 grams) typical

Microsemi Corp.
Colorado

5817SM



Figure 1
Typical Forward Characteristics

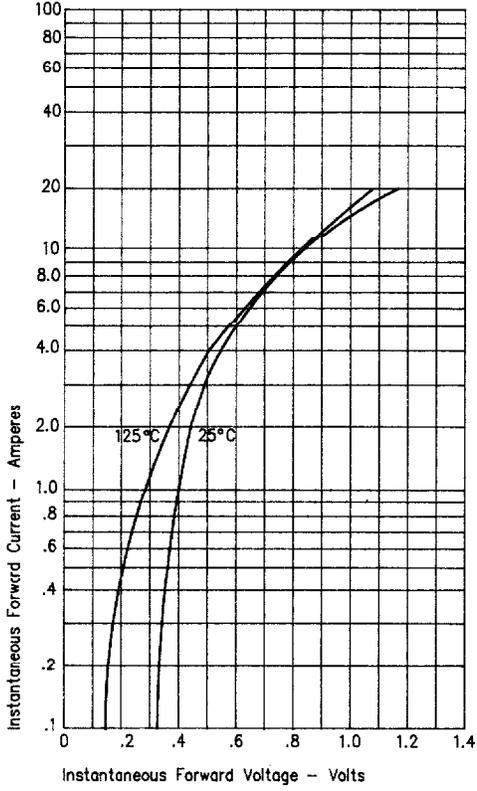


Figure 3
Typical Junction Capacitance

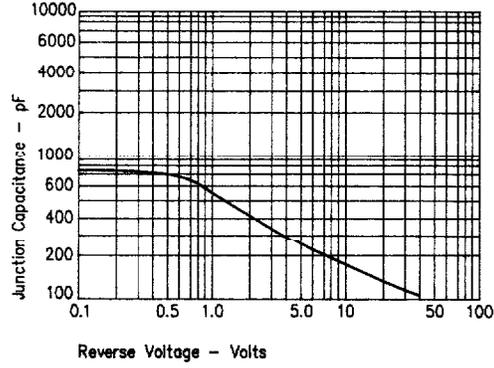
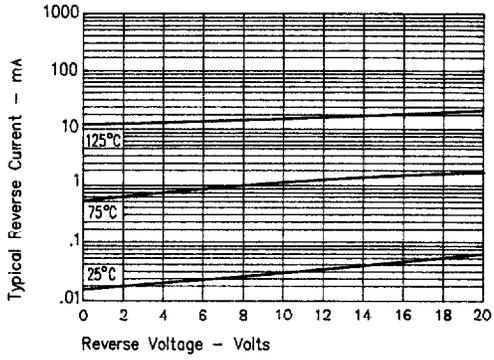


Figure 2
Typical Reverse Characteristics



5818SM & 5819SM

Figure 1
Typical Forward Characteristics

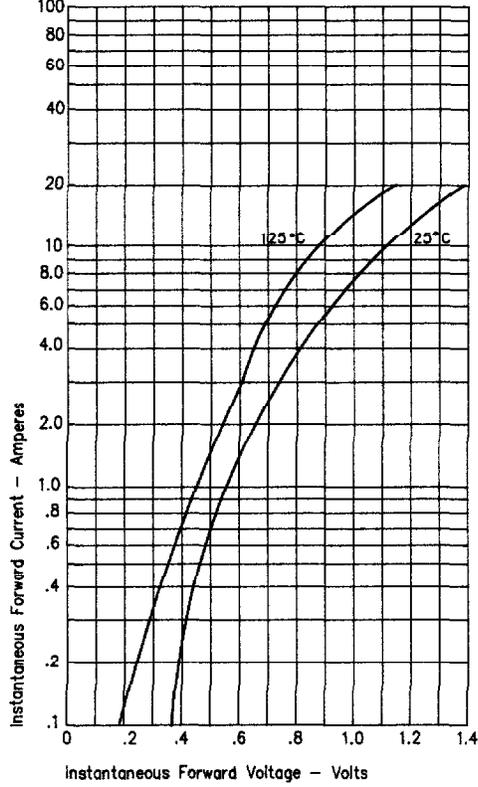


Figure 3
Typical Junction Capacitance

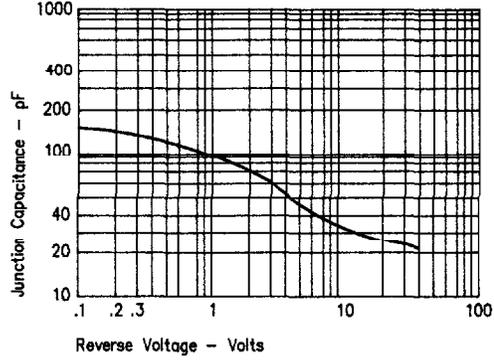


Figure 2
Typical Reverse Characteristics

