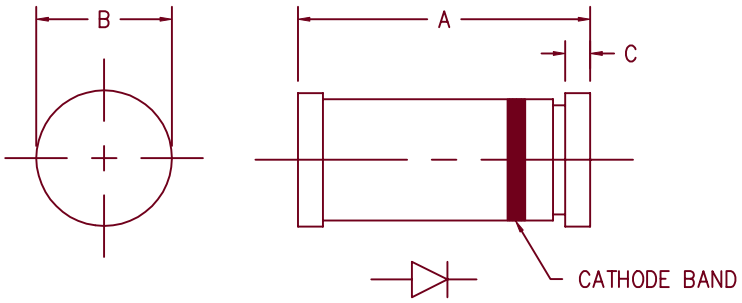
1 Amp Schottky Rectifier
5817SM, 5818SM, 5819SM



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.189	.205	4.80	5.20	
B	.094	.105	2.39	2.66	Dia.
C	.016	.022	.41	.55	

GLASS HERMETIC DO213AB

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

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

Electrical Characteristics

		5817SM	5818SM	5819SM	
Average forward current	$I_{F(AV)}$	1A	1A	1A	
End Cap Temperature		130°C	125°C	125°C	Square wave, $R_{\theta JEC}$ = 45 C/W
Maximum surge current	I_{FSM}	50A	50A	50A	8.3ms, half sine, T_J = 150°C
Max peak forward voltage	V_{FM}	.36V	.39V	.39V	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}	−65°C to 150°C
Operating junction temp range	T_J	−65°C to 150°C
Maximum thermal resistance	$R_{\theta JEC}$	45°C/W Junction to End Cap
Weight		.004 ounces (.012 grams) typical

1−25−00 Rev. 1

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5817SM

Figure 1
Typical Forward Characteristics

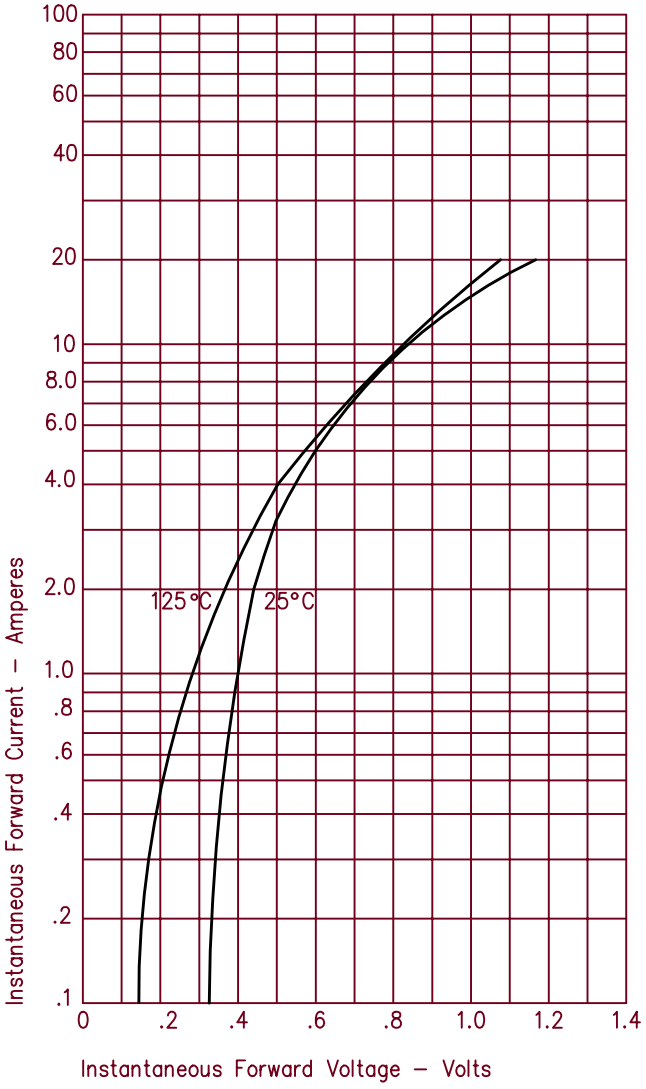


Figure 2
Typical Reverse Characteristics

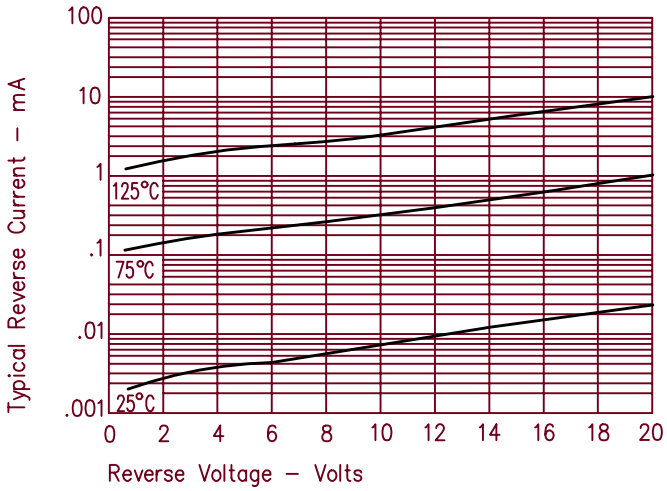
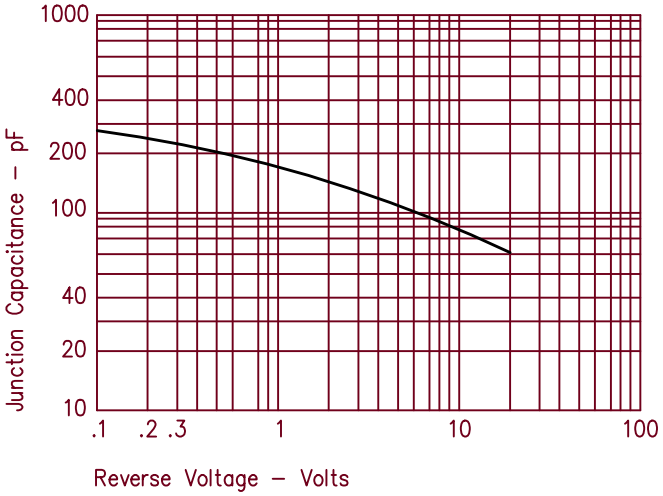


Figure 3
Typical Junction Capacitance



5818SM & 5819SM

Figure 1
Typical Forward Characteristics

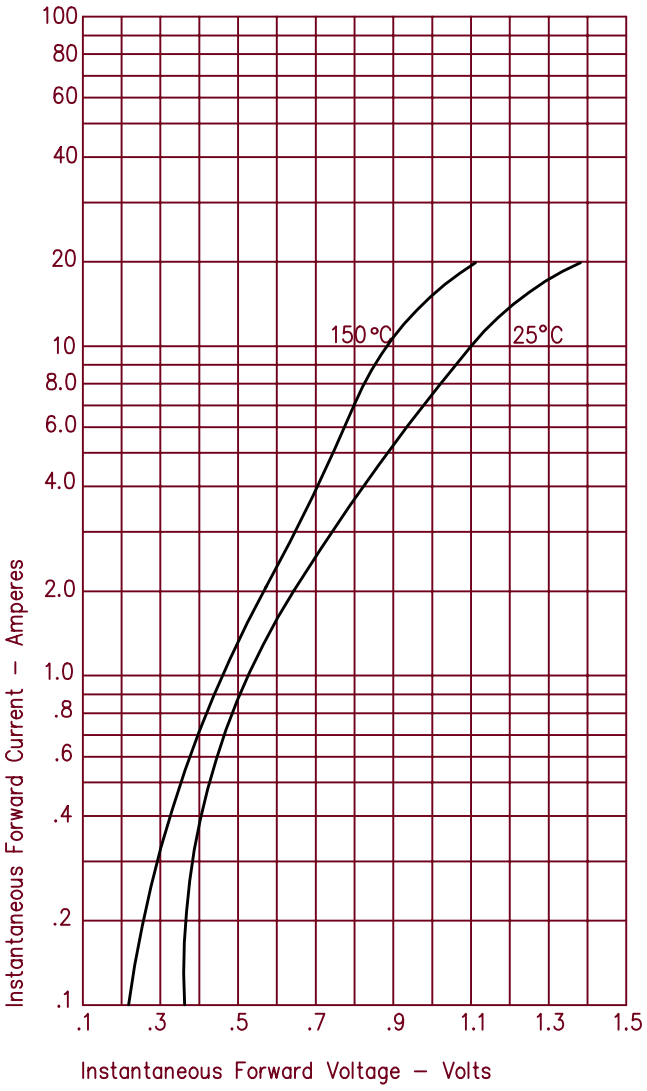


Figure 2
Typical Reverse Characteristics

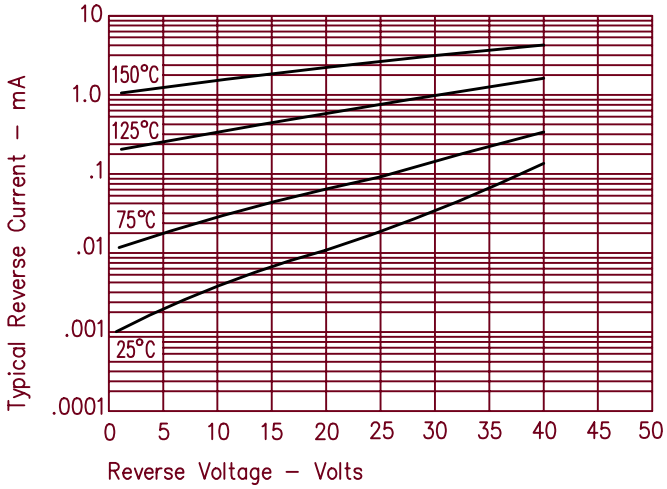


Figure 3
Typical Junction Capacitance