



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

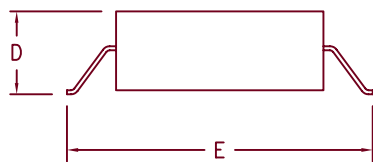
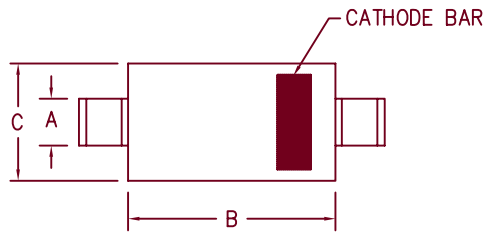
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# 1 Amp Schottky Rectifier 5817SMG — 5819SMG



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	.077	.104	1.95	2.64	
E	.234	.256	5.95	6.50	

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

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

Electrical Characteristics					
		<u>5817SMG</u>	<u>5818SMG</u>	<u>5819SMG</u>	
Average forward current	$I_F(AV)$	1A	1A	1A	Square wave $R_{\theta JL} = 30^\circ C/W$ 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		136°C	133°C	133°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	$R_{\theta JL}$	25°C/W Junction to Lead
Weight		.0047 ounces (.013 grams) typical



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05-09-07 Rev. 3

# 5817SMG

Figure 1  
Typical Forward Characteristics

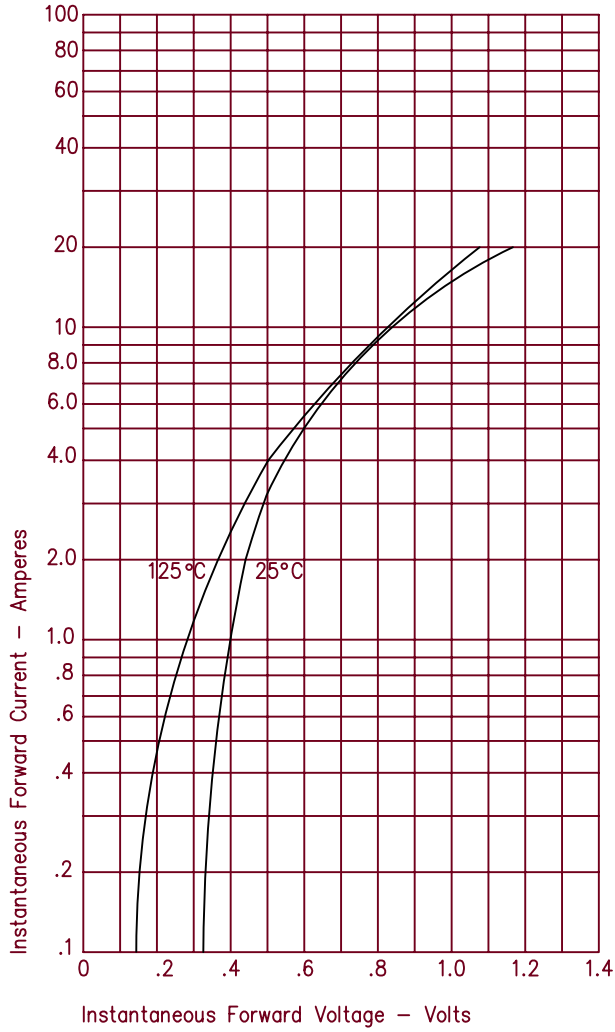


Figure 3  
Typical Junction Capacitance

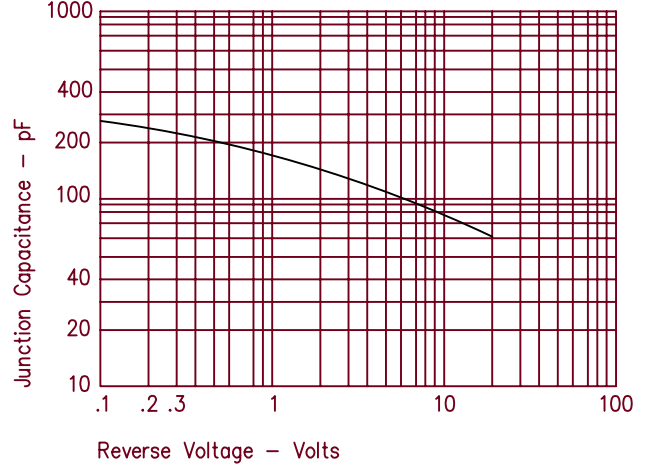
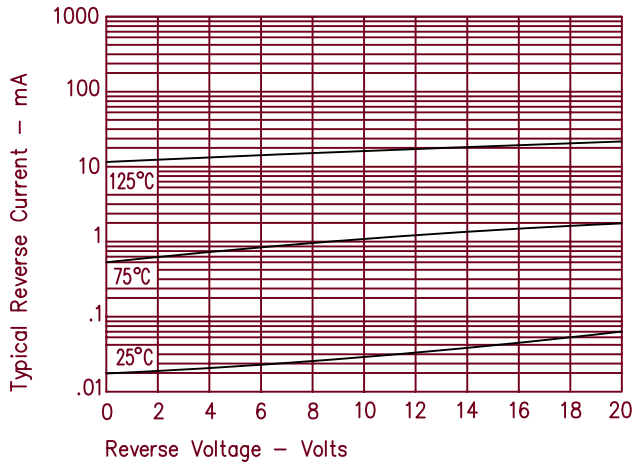


Figure 2  
Typical Reverse Characteristics



# 5818SMG & 5819SMG

Figure 1  
Typical Forward Characteristics

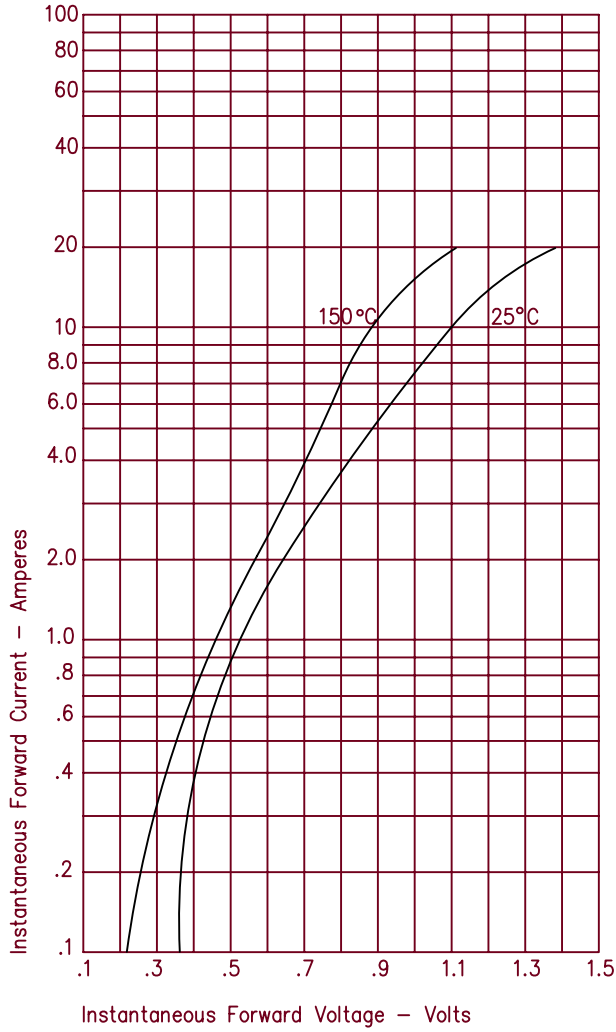


Figure 3  
Typical Junction Capacitance

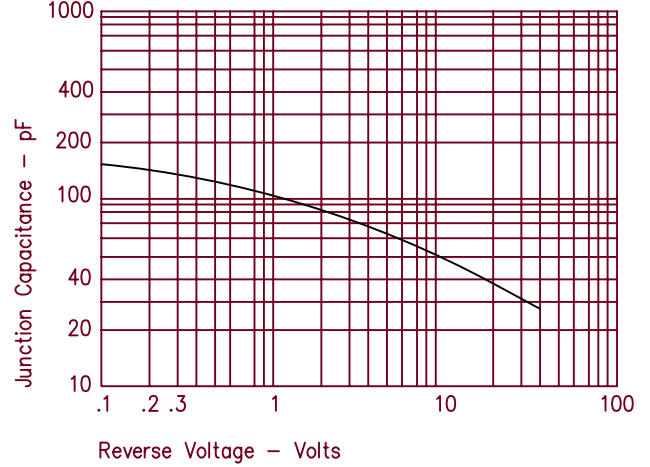


Figure 2  
Typical Reverse Characteristics

