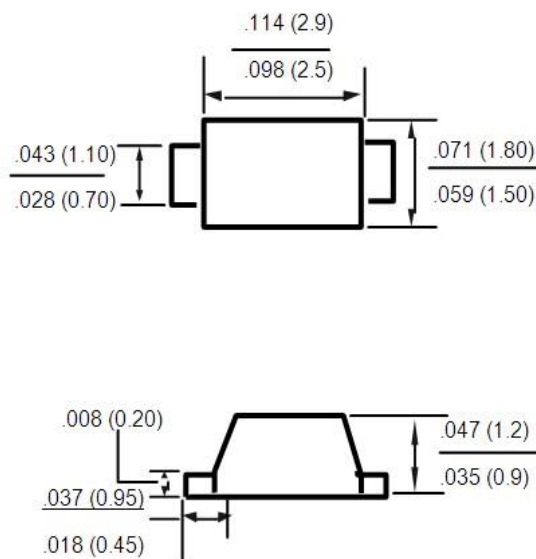


**特性(FEATURES):**

- ◆ Extremely low  $V_F$ .
- ◆ Low stored charge, majority carrier conduction.
- ◆ Low power loss/high efficient
- ◆ For Use In Low Voltage, High Frequency Inverters.
- ◆ Free Wheeling, And Polarity Protection Applications.



**MAXIMUM RATING @  $T_a=25^\circ\text{C}$  unless otherwise specified**

Parameter	Symbol	B5817W	B5818W	B5819W	Unit
Non-Repetitive Peak reverse voltage	$V_{RSM}$	24	36	48	V
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$				
Working Peak Reverse Voltage	$V_{RWM}$	20	30	40	V
DC Reverse Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	$I_o$	1			A
Peak Forward Surge Current @=8.3ms	$I_{FSM}$	25			A
Power Dissipation	$P_d$	250			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80			$^\circ\text{C}/\text{W}$
Storage Temperature	$T_j, T_{stg}$	-65 to +125			$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test Conditions	MIN	MAX	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$			
		B5817W	20		V
		B5818W	30		
B5819W	40				
Reverse voltage leakage current	$I_R$	$V_R=20V$	B5817W		1
		$V_R=30V$	B5818W		
		$V_R=40V$	B5819W		
Forward voltage	$V_F$	B5817W	$I_F=1A$	0.45	V
			$I_F=3A$	0.75	
		B5818W	$I_F=1A$	0.55	
			$I_F=3A$	0.875	
		B5819W	$I_F=1A$	0.6	
			$I_F=3A$	0.9	
Diode capacitance	$C_D$	$V_R=4V, f=1MHz$		120	pF

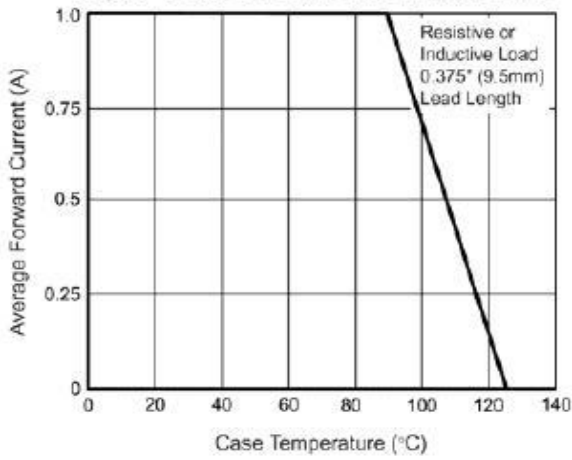
## ORDERING INFORMATION

Type No.	Marking	Package Code
B5817W	SJ	SOD-123
B5818W	SK	SOD-123
B5819W	SL	SOD-123

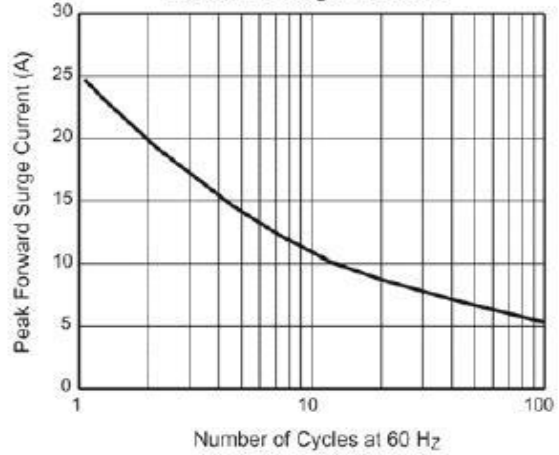


## TYPICAL CHARACTERISTICS @ Ta=25 unless otherwise specified

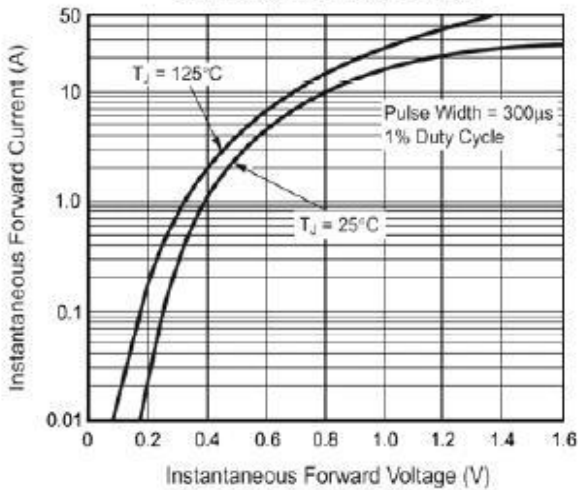
**Fig. 1 - Forward Current Derating Curve**



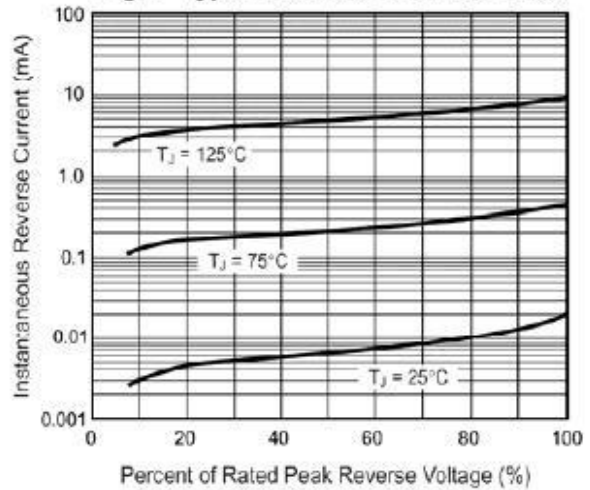
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



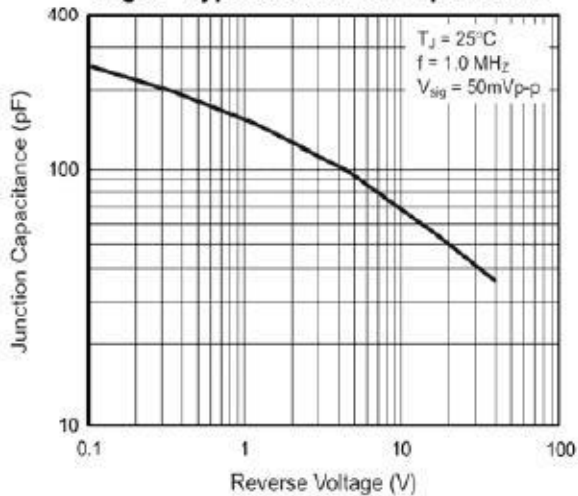
**Fig. 3 - Typical Instantaneous Forward Characteristics**



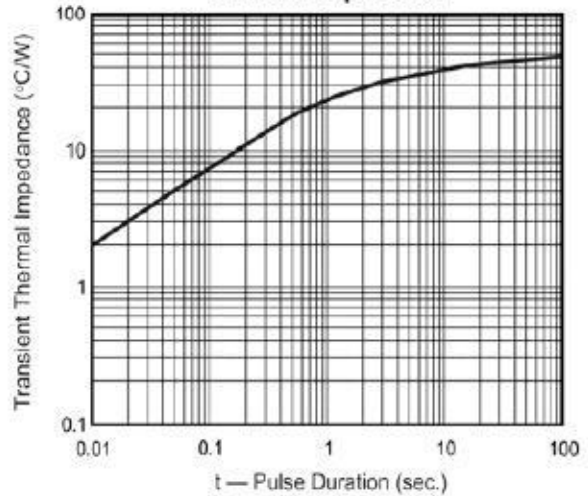
**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**



**Fig. 6 - Typical Transient Thermal Impedance**



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