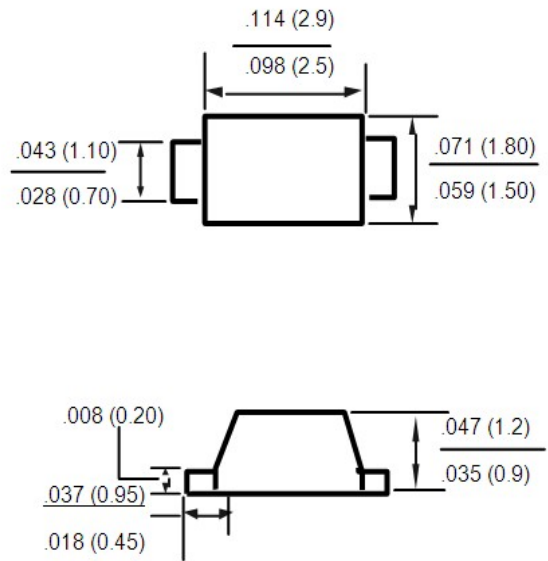


B5817W-B5819W**特 性(FEATURES):**

- ◆ 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 @ Ta=25°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			°C/W
Storage Temperature	T_j, T_{stg}	-65 to +125			°C

B5817W-B5819W

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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

B5817W-B5819W

TYPICAL CHARACTERISTICS @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Fig. 1 - Forward Current Derating Curve

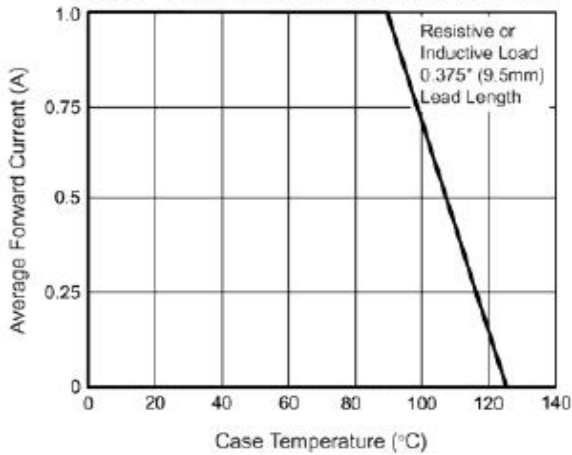


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

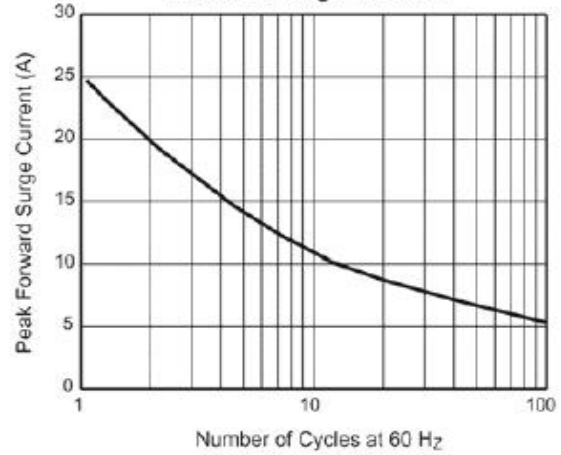


Fig. 3 - Typical Instantaneous Forward Characteristics

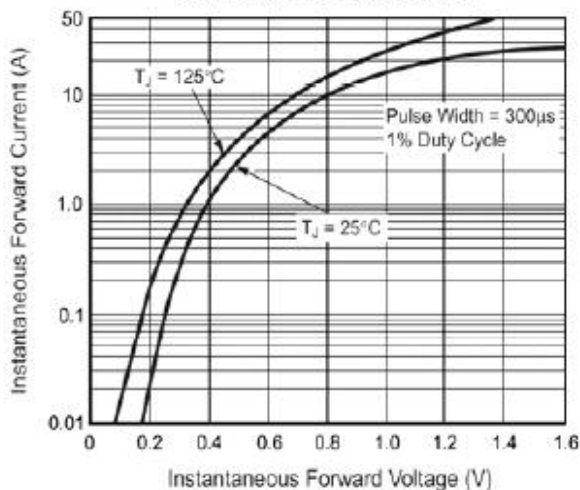


Fig. 4 - Typical Reverse Characteristics

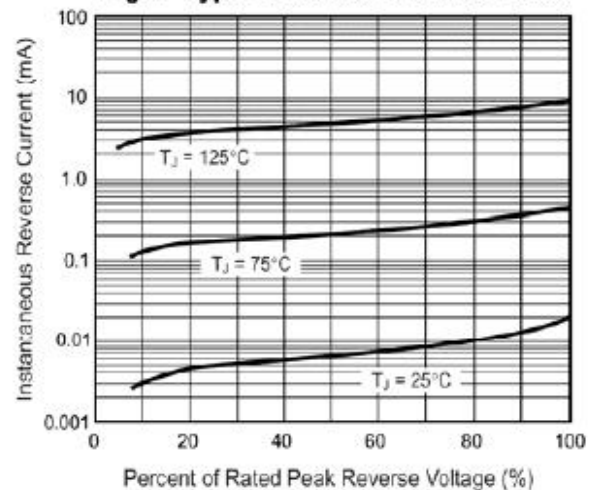


Fig. 5 - Typical Junction Capacitance

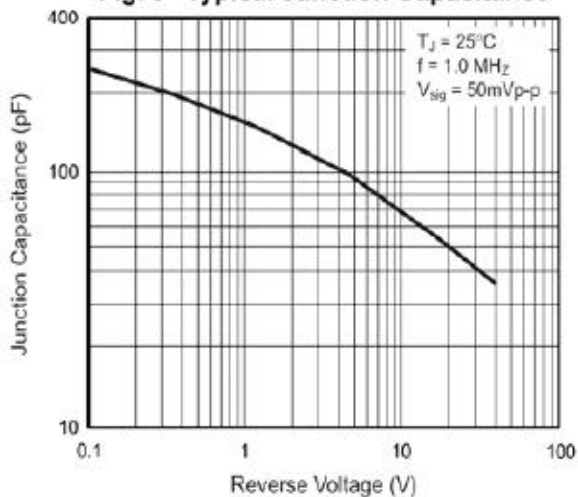


Fig. 6 - Typical Transient Thermal Impedance

