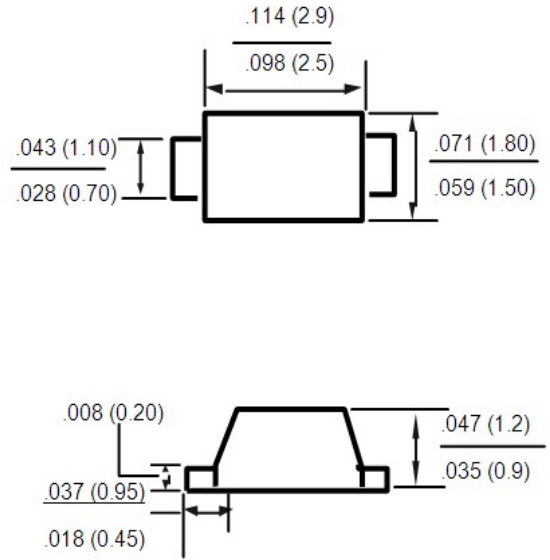


B5817W-B5819W

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 @ $T_a=25^\circ\text{C}$ 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			$^\circ\text{C}$

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			V	
		B5817W	20			
		B5818W	30			
		B5819W	40			
Reverse voltage leakage current	I _R	V _R =20V	B5817W		1	mA
		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

B5817W-B5819W

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Fig. 1 - Forward Current Derating Curve

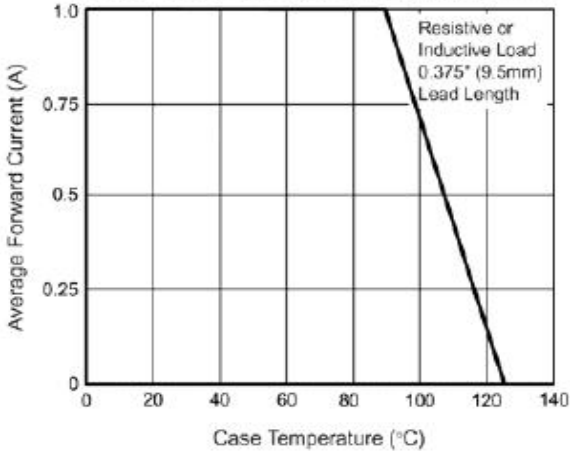


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

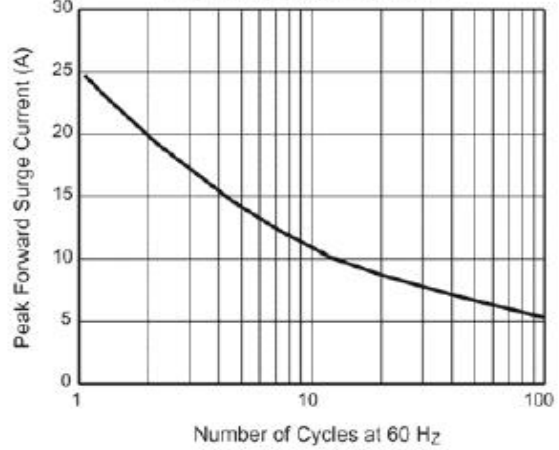


Fig. 3 - Typical Instantaneous Forward Characteristics

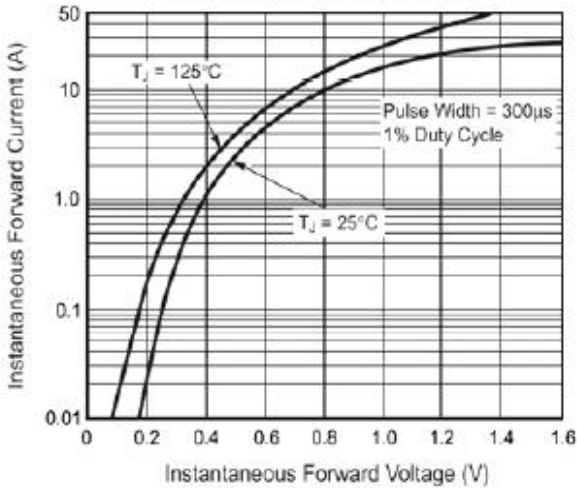


Fig. 4 - Typical Reverse Characteristics

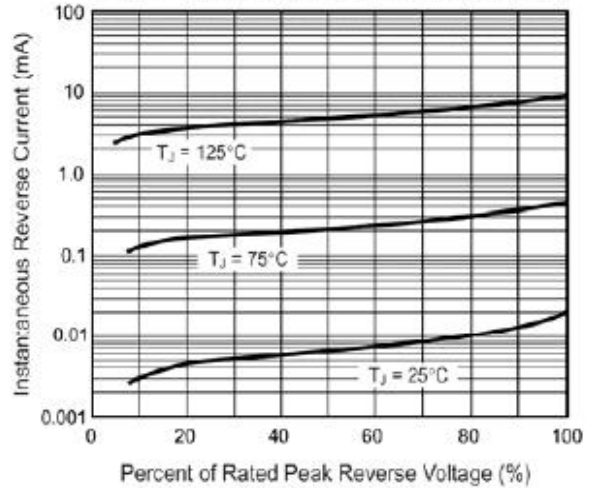


Fig. 5 - Typical Junction Capacitance

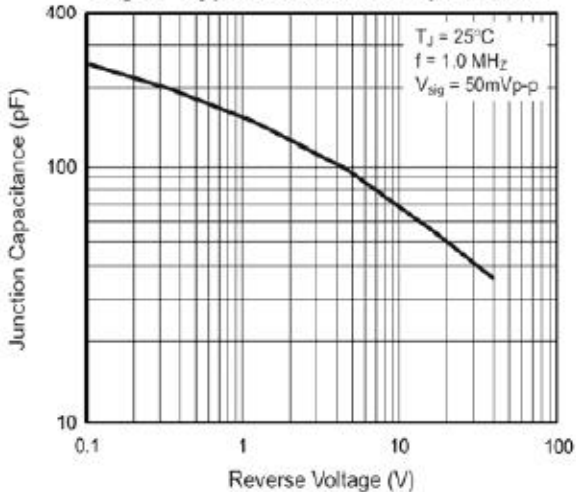


Fig. 6 - Typical Transient Thermal Impedance

