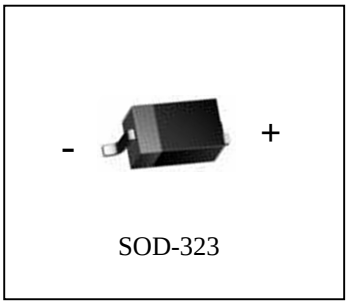
SCHOTTKY BARRIER DIODE

B5817WS/B5818WS/B5819WS

FEATURES

or use in low voltage, high frequency inverters

Free wheeling, and polarity protection applications.



SOD-323

MARKING ： B5817WS: SJ B5818WS:SK B5819WS: SL

Maximum Ratings and Electrical Characteristics, Single Diode @TA=25 ℃

Paramete	Symbol	B5817WS	B5818WS	B5819WS	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	20	30	40	V
Peak repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
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}	9			A
Repetitive Peak Forward Current	I_{FR}	1.5			A
Power Dissipation	Pd	250			mW
ThermalResistanc Junction to Ambient	$R_{\theta JA}$	500			℃/W
Storage temperature	TSTG	-65~+150			℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Max	Unit
Reverse breakdown voltage	V(BR)	IR= 1mA	B5817WS B5818WS B5819WS	20 30 40		V
Reverse voltage leakage current	I_R	VR=20V VR=30V VR=40V	B5817WS B5818WS B5819WS		1	mA
Forward voltage	V_F	B5817WS	IF=1A IF=3A		0.45 0.75	V
		B5818WS	IF=1A IF=3A		0.55 0.875	V
		B5819WS	IF=1A IF=3A		0.6 0.9	V
Diode capacitance	C	VR=4V, f=1MHz			120	pF

B5817WS/B5818WS/B5819WS

Typical Characteristics

Fig. 1 - Forward Current Derating Curve

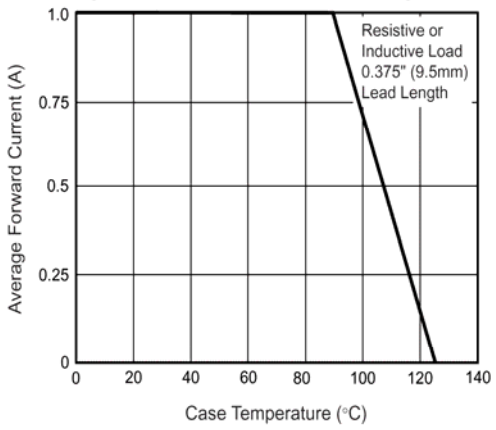


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

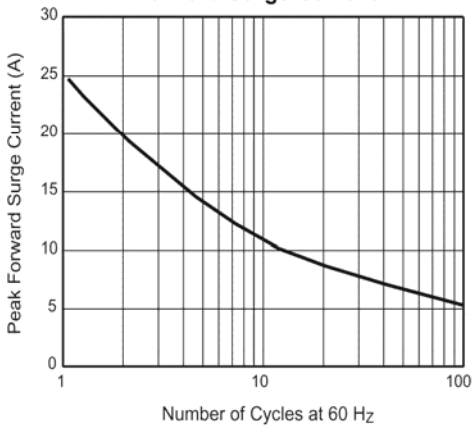


Fig. 3 - Typical Instantaneous Forward Characteristics

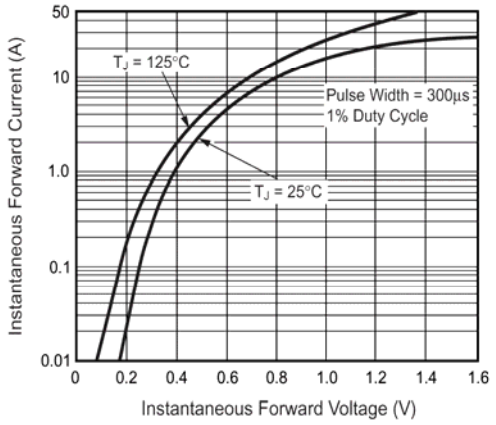


Fig. 4 - Typical Reverse Characteristics

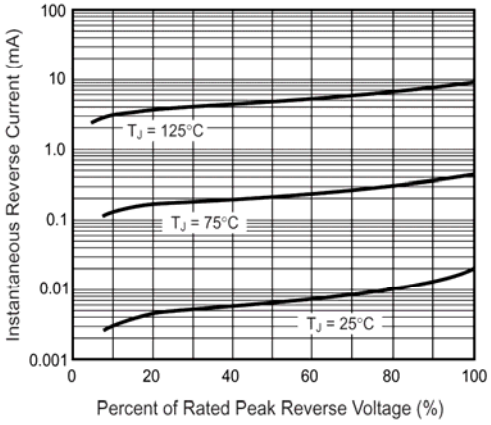


Fig. 5 - Typical Junction Capacitance

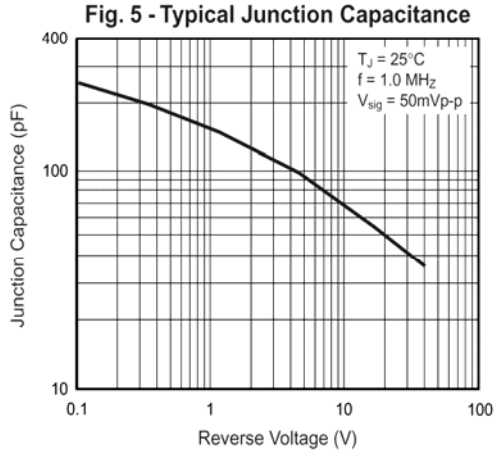


Fig. 6 - Typical Transient Thermal Impedance