



SCHOTTKY BARRIER DIODE

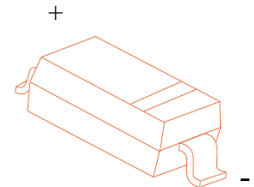
FEATURES

For use in low voltage, high frequency inverters
Free wheeling, and polarity protection applications.

MARKING: B5817W: SJ

B5818W:SK

B5819W: SL

SOD-123**Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$**

Parameter	Symbol	B5817W	B5818W	B5819W	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	20	30	40	V
Peak repetitive Peak reverse voltage	V_{RRM}	20	30	40	V
Working Peak Reverse Voltage	V_{RWM}				
DC Blocking 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 @ $t=8.3\text{ms}$	I_{FSM}	9			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	P_d	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250			$^\circ\text{C}/\text{W}$
Storage temperature	T_{STG}	-65~+150			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ unless otherwise specified)

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

Typical Characteristics

