

SOD-123 Plastic-Encapsulate Diodes

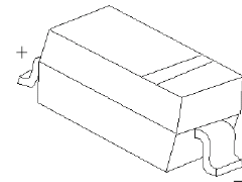
B5817LW-5819LW SCHOTTKY BARRIER DIODE

FEATURES

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

MARKING: B5817LW: SJA
B5818LW: SKA
B5819LW: SLA

SOD-123



Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	B5817LW	B5818LW	B5819LW	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=8.3ms	I_{FSM}	9			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	P_d	350			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357			°C/W
Storage Temperature	T_{STG}	-55~+150			°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$			V
		B5817LW	20		
		B5818LW B5819LW	30 40		
Reverse voltage leakage current	I_R	$V_R=20V$			mA
		$V_R=30V$		1	
		$V_R=40V$			
Forward voltage	V_F	B5817LW	$I_F=1A$	0.49	V
			$I_F=3A$	0.8	
		B5818LW	$I_F=1A$	0.6	V
			$I_F=3A$	0.95	
		B5819LW	$I_F=1A$	0.66	V
			$I_F=3A$	1.1	
Diode capacitance	C_D	$V_R=4V, f=1MHz$		120	pF