

SOD-323 Plastic-Encapsulate Diodes

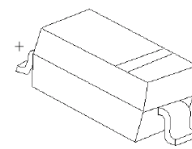
B5817WS-5819WS SCHOTTKY BARRIER DIODE

FEATURES

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

MARKING: B5817WS: SJ
B5818WS:SK
B5819WS: SL

SOD-323



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

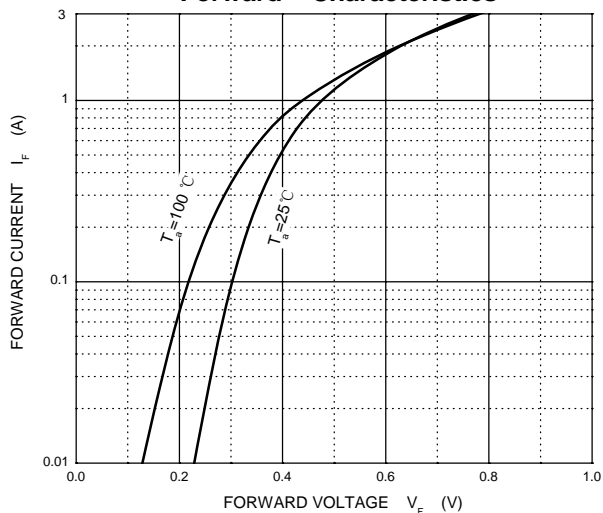
Parameter	Symbol	B5817WS	B5818WS	B5819WS	Unit
Non-repetitive peak reverse voltage	V_{RM}	20	30	40	V
Peak repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Working peak reverse voltage	V_{RWM}				
DC blocking voltage	V_R				
RMS reverse voltage	$V_{R(RMS)}$	14	21	28	V
Average rectified output current	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	250			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400			°C/W
Junction temperature	T_J	125			°C
Storage temperature	T_{STG}	-55~+150			°C

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

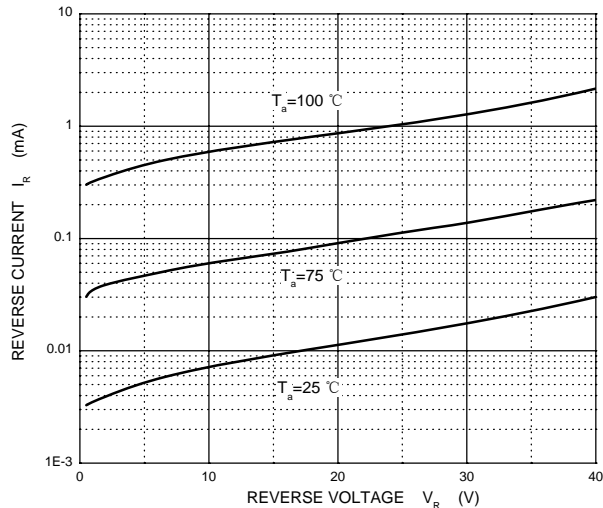
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$			V
		B5817WS	20		
		B5818WS B5819WS	30 40		
Reverse voltage leakage current	I_R	$V_R=20V$			mA
		$V_R=30V$		1	
		$V_R=40V$			
Forward voltage	V_F	B5817WS	$I_F=1A$	0.45	V
			$I_F=3A$	0.75	
		B5818WS	$I_F=1A$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

B5819WS

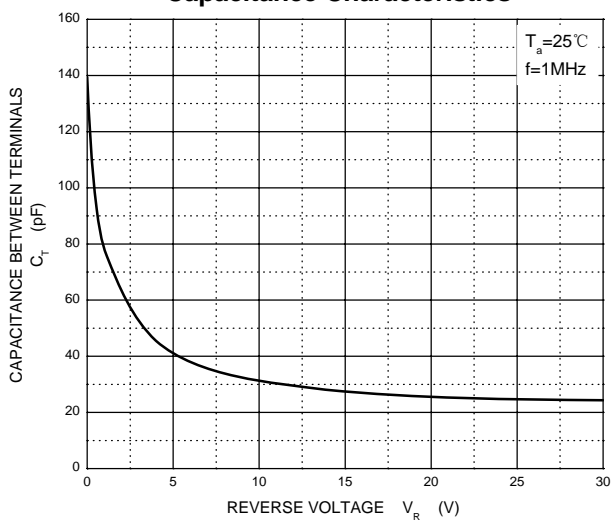
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

