

SCHOTTKY BARRIER DIODE

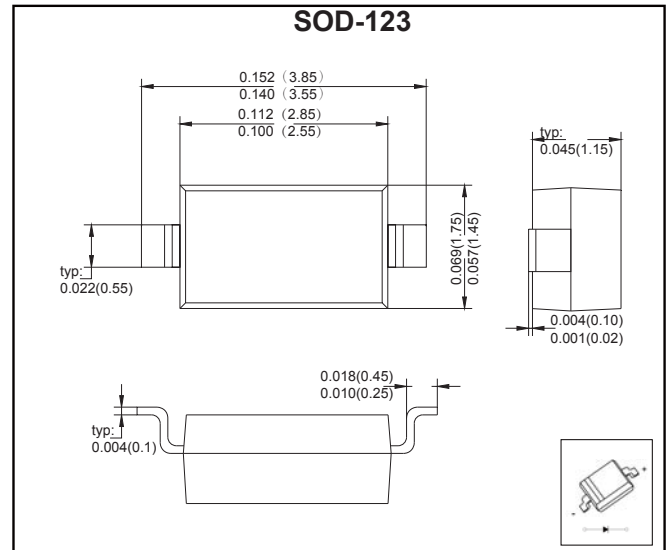
VOLTAGE RANGE: 20V-40V PEAK PULSE POWER:500mW

FEATURES

- High Current Capability
- Low Forward Voltage Drop

MECHANICAL DATA

- Case: SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified

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
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	P_D	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200			°C/W
Junction temperature	T_J	125			°C
Storage Temperature	T_{STG}	-55~+150			°C

Electrical Specification ($T_A=25^\circ\text{C}$ 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 $I_F=1\text{A}$		0.45	V
		B5817W $I_F=3\text{A}$		0.75	V
		B5818W $I_F=1\text{A}$ B5818W $I_F=3\text{A}$		0.55 0.875	V
Diode capacitance	C_D	B5819W $I_F=1\text{A}$		0.6	V
		B5819W $I_F=3\text{A}$		0.9	V
Diode capacitance	C_D	$V_R=4\text{V}, f=1\text{MHz}$		120	pF

	B5817W	5818W	B5819W
MARKING:	SJ	BSK	SL

RATINGS AND CHARACTERISTIC CURVES

