

## SOD-323 SCHOTTKY BARRIER DIODE

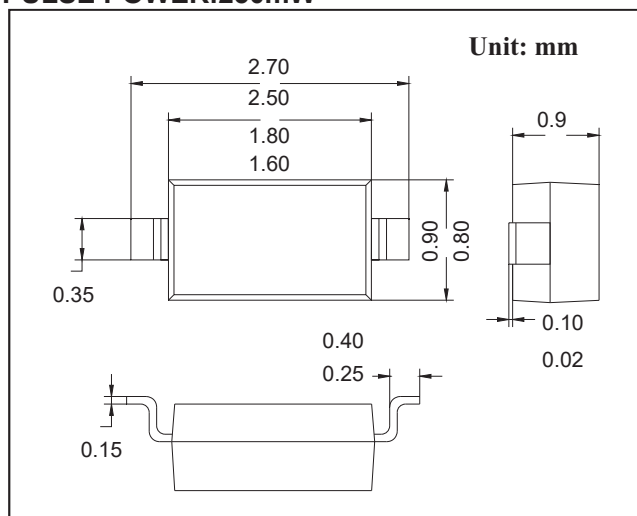
VOLTAGE RANGE: 20V-40V PEAK PULSE POWER:250mW

### FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient
- Protection Negligible Reverse Recovery Time
- Very Low Reverse Capacitance

### MECHANICAL DATA

- Case: SOD-323 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	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
Forward current	$I_{FSM}$	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 Specification ( $T_A=25^\circ\text{C}$ unless otherwise specified)

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

#### MARKING:

B5817WS	B5818WS	B5819WS
SJ	SK	SL

RATINGS AND CHARACTERISTIC CURVES

