HFZT

B5817WS-5819WS

SCHOTTKY BARRIER DIODE

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

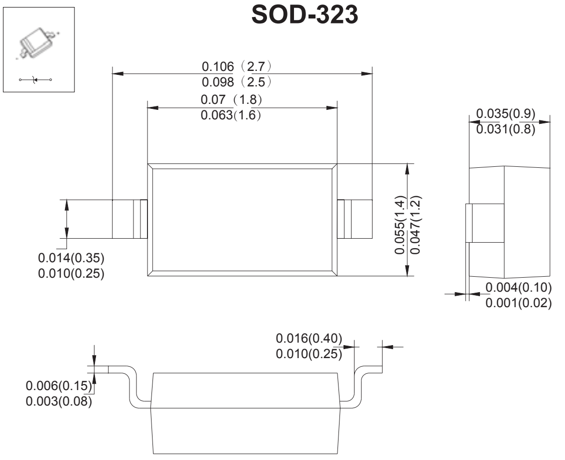
FEATURES

- High Current Capability
- Low Forward Voltage Drop

MECHANICAL DATA

- Case: SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

SOD-323



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 **Working peak reverse voltage** **DC blocking voltage**	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS reverse voltage	$V_{R(RMS)}$	14	21	28	V
Average rectified output current	I_O	1			A
□ □□□□□□□□□□□□□□□□□□□**Forward** □□□□□□**urrent** □ □□□□□ □	I_{FSM}	9			A
Repetitive peak forward current	I_{FRM}	1.5			A
Power dissipation	Pd	250			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400			℃/W
Junction temperature	T_J	125			℃
Storage temperature	T_{STG}	-55~+150			℃

Electrical Specification (T_A=25°C unless otherwise specified)

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

MARKING:

B5817WS	B5818WS	B5819WS
SJ	SK	SL

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics