

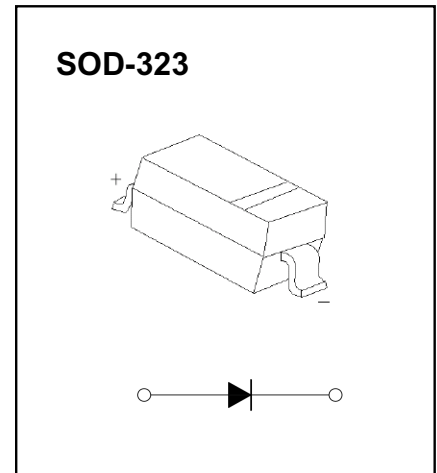
### ■ Features

- High Current Capability
- Low Forward Voltage Drop
- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications

### ■ Mechanical Data

- package:SOD-323
- Polarity: Color band denotes cathode end
- Mounting Position: Any

### ■ Ordering Information



Part Number	Package	Marking	Packing	Quantity per reel	Reel Size
B5817WS	SOD-323	SJ	Tape & Reel	3,000 PCS	7 inches
B5818WS	SOD-323	SK	Tape & Reel	3,000 PCS	7 inches
B5819WS	SOD-323	SL	Tape & Reel	3,000 PCS	7 inches

### ■ Maximum Ratings & Thermal Characteristics(Ratings at 25°C ambient temperature unless otherwise specified.)

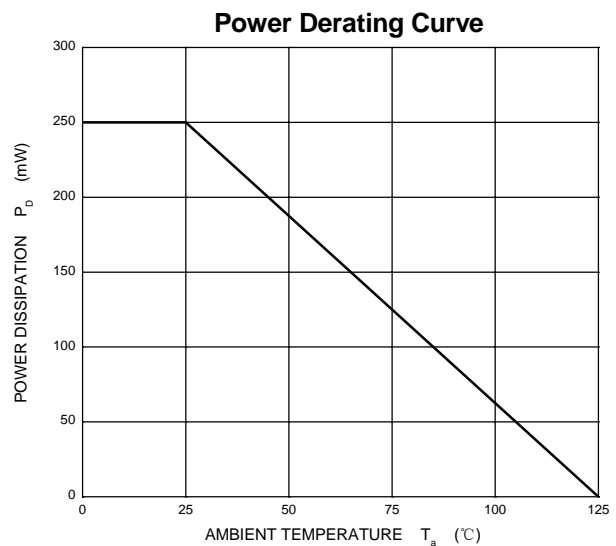
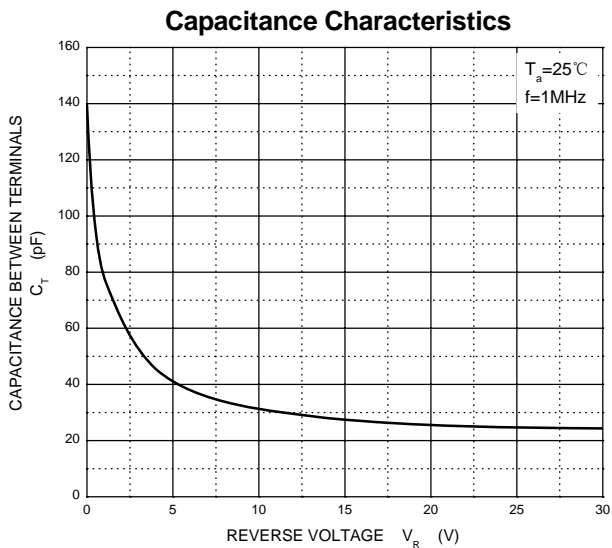
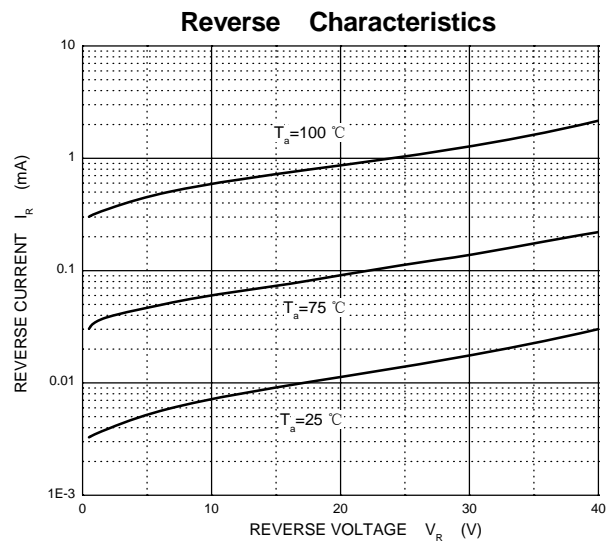
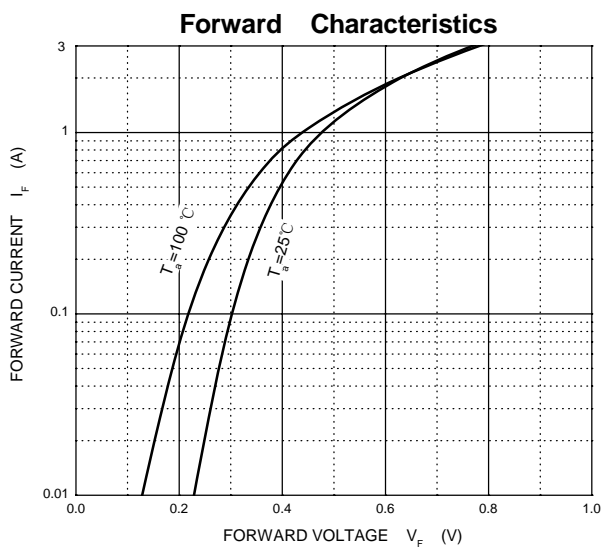
Parameters	Symbol	B5817WS	B5818WS	B5819WS	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IFM	1			A
Peak forward surge current 8.3ms single half sine-wave	IFSM	9			A
Power Dissipation	PD	400			mW
Typical thermal resistance	R $\theta$ JA	250			°C/W
Operating junction temperature	T <sub>j</sub>	125			°C
Storage temperature range	TSTG	-50-+150			°C



■ **Electrical Characteristics**(Ratings at 25°C ambient temperature unless otherwise specified)

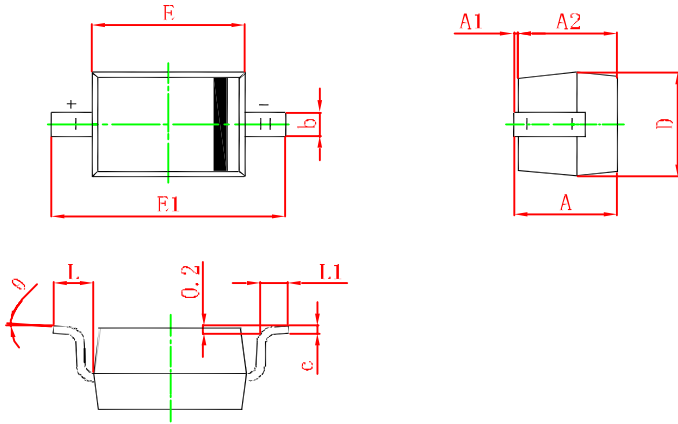
Parameters	Symbol	Test conditions	B5817WS	B5818WS	B5819WS	Unit
Maximum forward voltage	V <sub>F</sub>	IF = 1.0A	0.450	0.550	0.600	V
		IF = 3.0A	0.750	0.875	0.900	
Maximum reverse breakdown voltage	V <sub>R</sub>	IR=1mA	20	30	40	V
Maximum reverse current	I <sub>R</sub>	VR=20V B5817WS VR=30V B5818WS VR=40V B5819WS	1.0			mA
Type junction capacitance	C <sub>j</sub>	VR = 4.0V, f = 1MHz	120			pF

**Typical Characteristics**





■ SOD-323 Package Outline Dimensions



Symbol	Min	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
$\theta$	0°	8°