

Features

- V_R 20V/30V/40V
- $I_{F(AV)}$ 1A
- For use in low voltage, high frequency inverters
- Free wheeling, and polanty protection applications

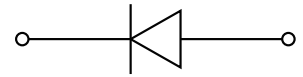
Applications

For use in low voltage high frequency circuit signals.

Mechanical Data

- Case: SOD-323
- Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

SOD-323



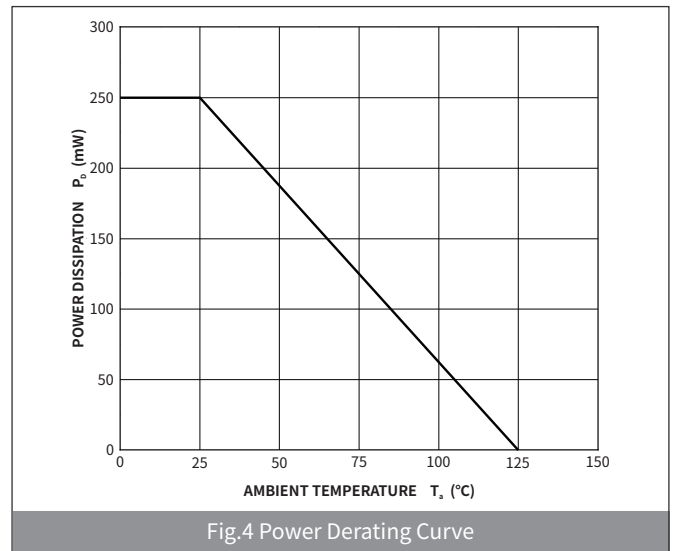
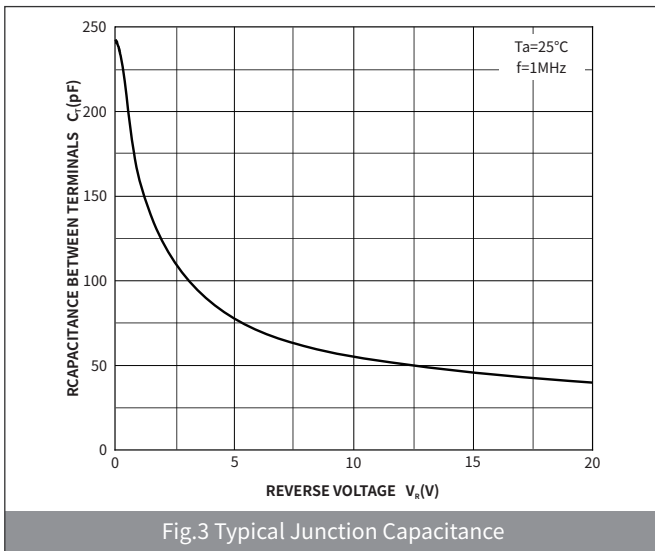
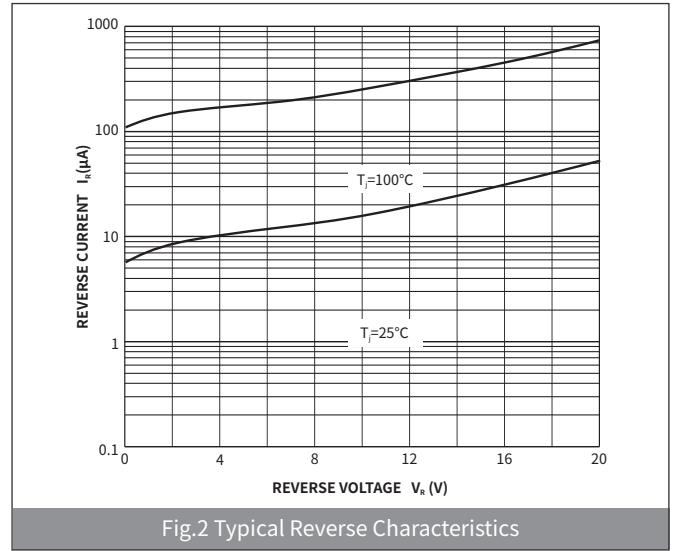
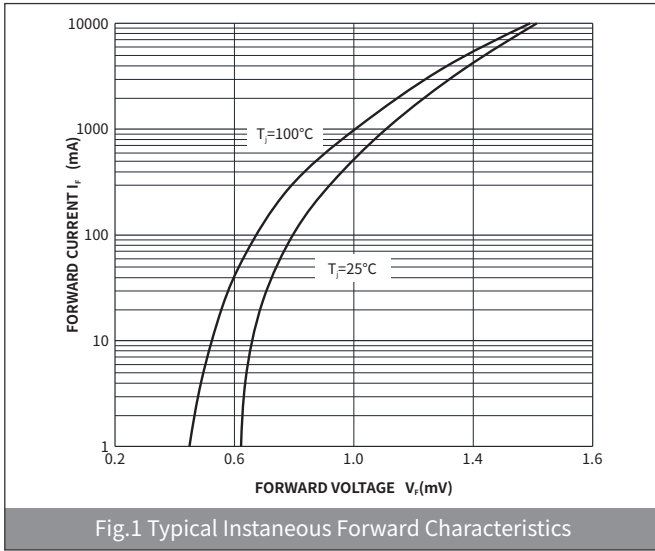
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	B5817WS	B5818WS	B5819WS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	20	30	40
Maximum RMS Voltage	V_{RMS}	V	14	21	28
Maximum DC Blocking Voltage	V_{DC}	V	20	30	40
Maximum Average Forward Rectified Current	$I_{F(AV)}$	A	1.0		
Non-repetitive Peak Forward Surge Current @t=8.3ms Half-sine wave	I_{FSM}	A	10		
Power Dissipation	P_d	mW	250		
Storage temperature	T_{stg}	°C	-55~+150		
Junction temperature	T_j	°C	-55 ~+150		
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	400		

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	B5817WS	B5818WS	B5819WS
Maximum instantaneous forward voltage	$I_F=1.0A$	V_{F1}	V	0.450	0.550	0.600
	$I_F=3.0A$	V_{F2}		0.750	0.875	0.900
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}$	I_R	mA	1.0		
Typical junction capacitance	$V_R=4.0V, f=1MHz$	C_J	pF	120		

► **Ratings And Characteristics Curves** ($T_a=25^\circ\text{C}$ Unless otherwise specified)



Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-323	R1	0.0048	3000	30000	120000	7"

Package Outline Dimensions (SOD-323)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.60	1.80	0.063	0.071
B	0.25	0.40	0.010	0.016
C	2.30	2.80	0.091	0.110
D	0.80	1.10	0.031	0.043
D ₁	0.80	0.90	0.031	0.035
E	1.20	1.40	0.047	0.055
F	0.08	0.18	0.003	0.007
L	0.475REF		0.019REF	
L ₁	0.25	0.40	0.010	0.016
H	-	0.14	-	0.006

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	0.80	-	0.031	-
K	-	1.40	-	0.055
M	0.80	-	0.031	-