

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20 to 40 V

Forward Current - 1 A

FEATURES

- ◆Metal silicon junction, majority carrier conduction
- ◆Guarding for overvoltage protection
- ◆Low power loss, high efficiency
- ◆High current capability
- ◆low forward voltage drop
- ◆High surge capability
- ◆For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: SOD-323
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 4.5mg /0.00016oz

Pinning

1.Cathode	2.Anode
	
	
SOD-323	

Marking Code

B5817WS	SJ
B5818WS	SK
B5819WS	YFW SL

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	B5817WS	B5818WS	B5819WS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage at 1 A at 3 A	V_F	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage TA = 25°C TA = 100°C	I_R	1 10			mA
Typical Junction Capacitance	C_j	110			pF
Storage and Operating Junction Temperature Range	T_j, T_{stg}	-55 ~ +150			°C

Fig.1 Forward Current Derating Curve

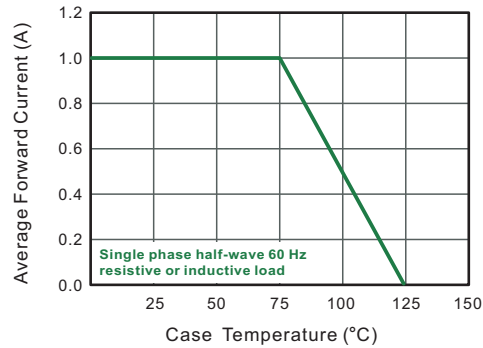


Fig.2 Typical Reverse Characteristics

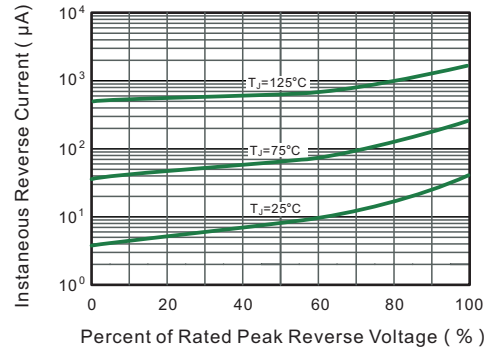


Fig.3 Typical Forward Characteristic

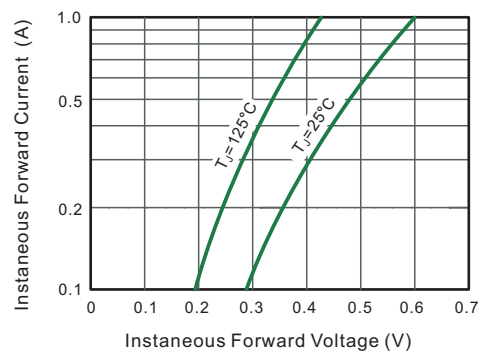


Fig.4 Typical Junction Capacitance

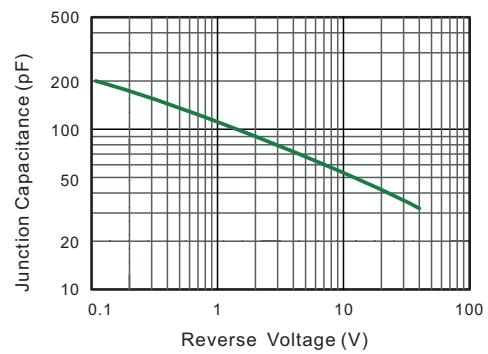
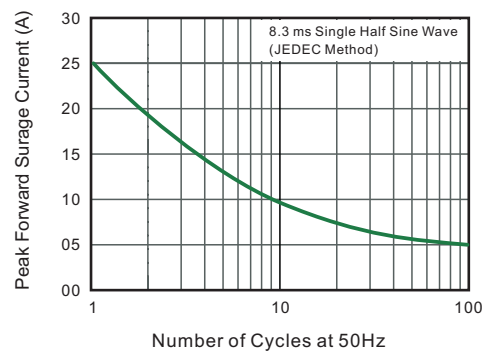


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Ordering information

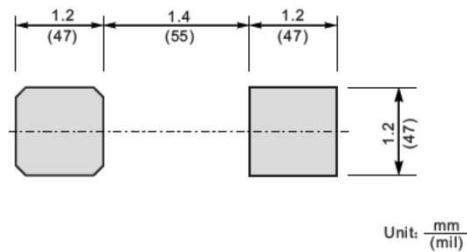
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



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