

**SCHOTTKY BARRIER DIODES**

**Reverse Voltage - 60 V**

**Forward Current - 1 A**

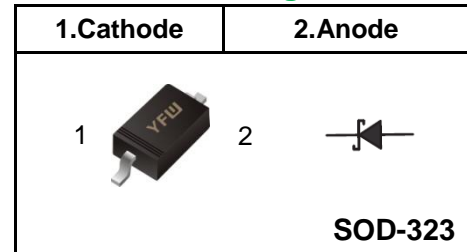
**FEATURES**

- ◆ Guard ring protection
- ◆ Low forward voltage drop
- ◆ For use in low voltage, high frequency inverters
- ◆ High surge current capability
- ◆ 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**



**Marking Code**

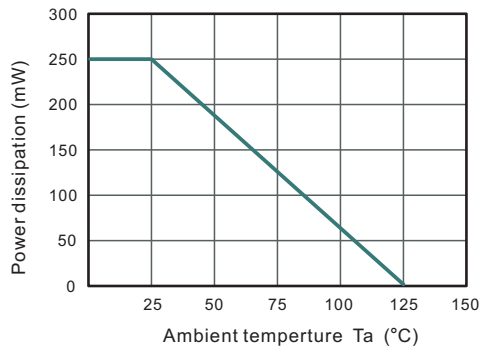
<b>B16WS</b>	<b>SM</b>
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**Maximum Ratings and Electrical characteristics**

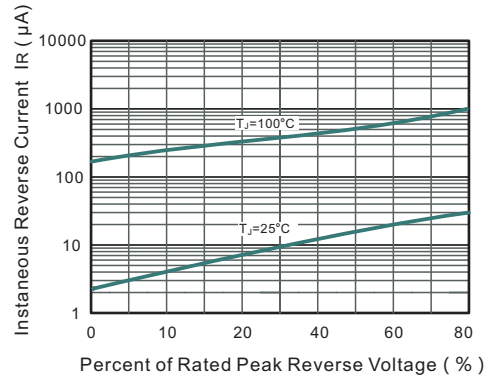
Ratings at 25 ° ambient temperature unless otherwise specified.

Parameter	Symbols	B16WS	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Continuous forward current	$I_{F(AV)}$	1	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1 @VR=60V	mA
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	$I_{FSM}$	10	A
Maximum Instantaneous Forward Voltage	$V_F$	0.7 @ IF=1.0A	V
Total capacitance VR=4V,f=1MHz	$C_{tot}$	120	pF
Total power dissipation	$P_{tot}$	250	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	400	°C/W
Junction Temperature	$T_j$	125	°C
Storage Temperature	$T_{stg}$	-55 ~ +150	°C

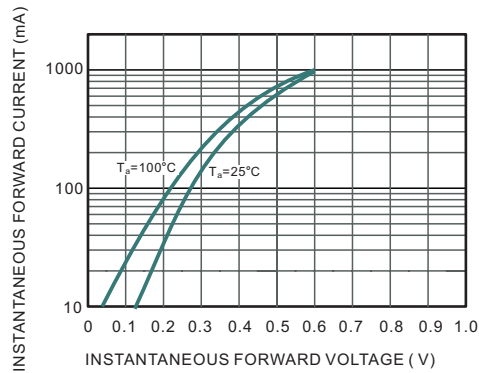
**Fig.1 Power Derating Curve**



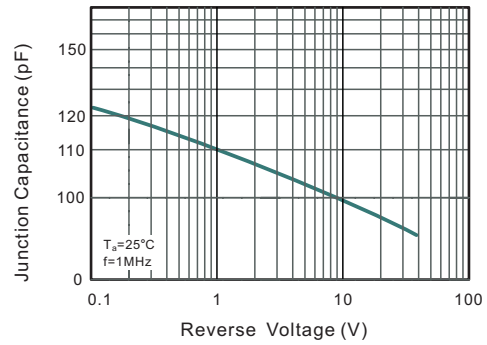
**Fig.2 Typical Reverse Characteristics**



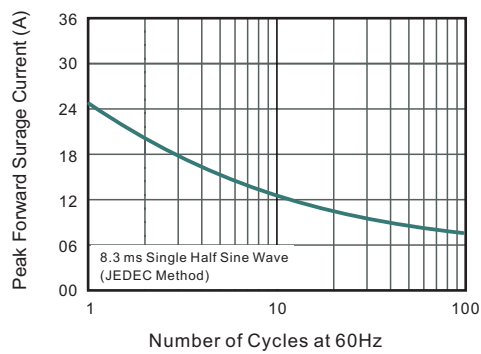
**Fig.3 TYPICAL FORWARD VOLTAGE**



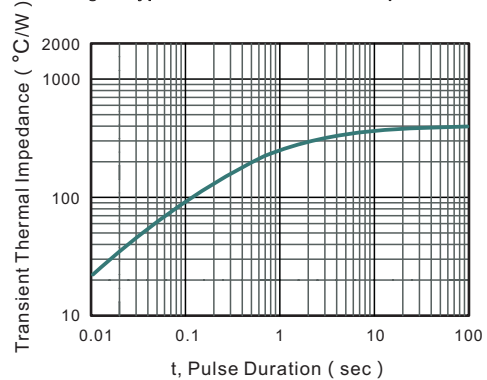
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6 Typical Transient Thermal Impedance**



**Ordering information**

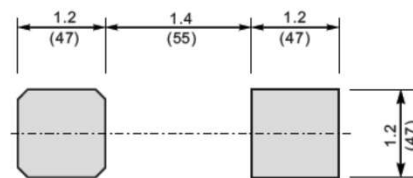
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

**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**



Unit:  $\frac{\text{mm}}{\text{mil}}$

## Disclaimer

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