

**SCHOTTKY BARRIER DIODES**

**Reverse Voltage - 60 V**

**Forward Current - 1 A**

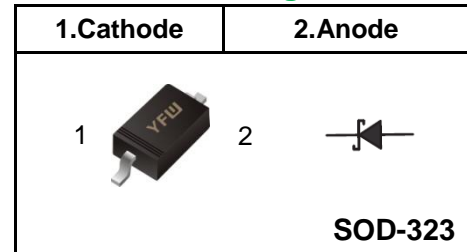
**FEATURES**

- ◆ 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**



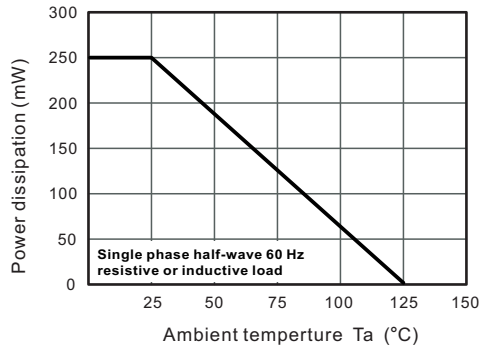
**Marking Code**

<b>B16WS</b>	<b>SM</b>
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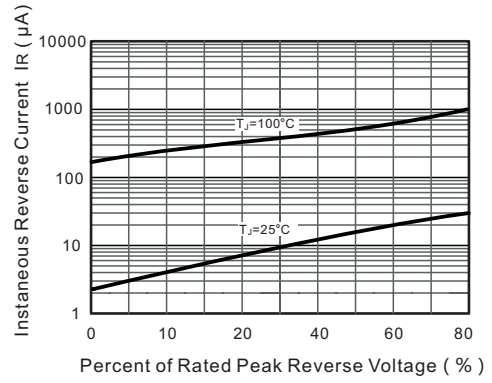
**Maximum Ratings and Electrical characteristics**  
Ratings at 25 ° ambient temperature unless otherwise specified.

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

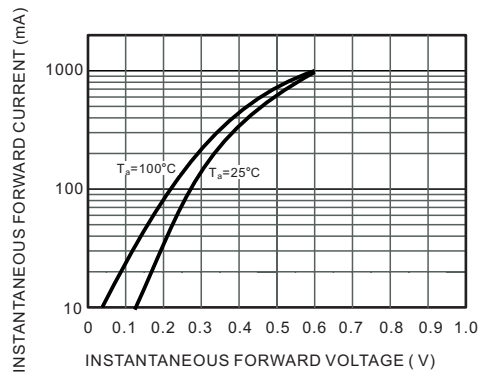
**Fig.1 Power Derating Curve**



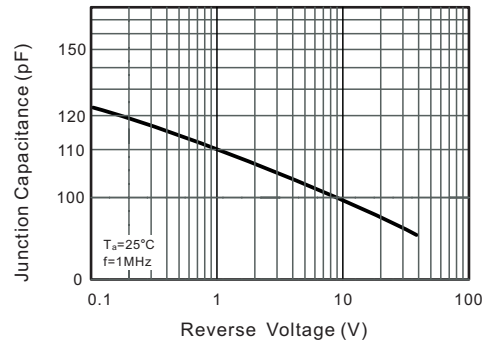
**Fig.2 Typical Reverse Characteristics**



**Fig.3 TYPICAL FORWARD VOLTAGE**

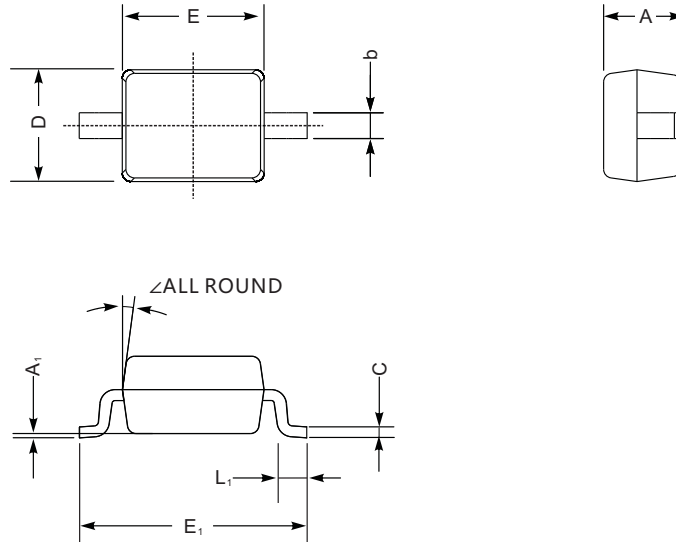


**Fig.4 Typical Junction Capacitance**



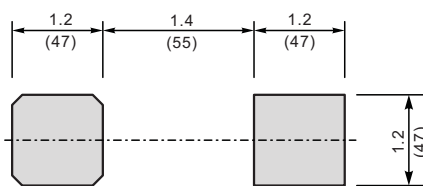
**Package Outline SOD-323**

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

**The recommended mounting pad size**



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

**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323	Tape/Reel, 7" reel	3000	EIA-481-1