

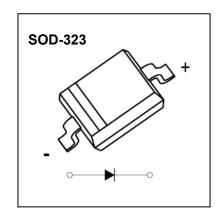
# JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD

# **SOD-323 Plastic-Encapsulate Diodes**

# **B16WS** Schottky Barrier Diode

#### **FEATURES**

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



Marking: SM



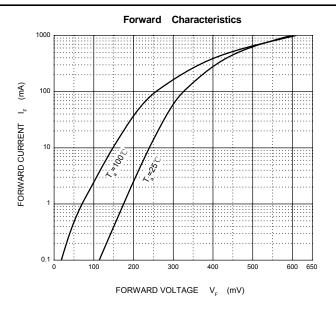
### MAXIMUM RATINGS( Ta=25℃ unless otherwise noted )

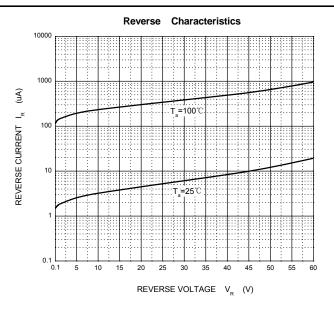
Symbol	Parameter	Value	Unit
V <sub>RRM</sub>	Maximum recurrent peak reverse voltage	60	
V <sub>RMS</sub>	Maximum RMS voltage	42	V
<b>V</b> <sub>DC</sub>	Maximum DC blocking voltage	60	
I <sub>F</sub>	Continuous forward current	1	Α
I <sub>FSM</sub>	Non-repetitive Peak forward surge current@t=8.3ms	10	A
P <sub>tot</sub>	Total power dissipation	250	mW
R <sub>θJA</sub>	Thermal resistance junction to ambient air	400	°C/W
T <sub>J</sub>	Operating Junction Temperature Range	-40 ~ +125	${}^{\!$
Tstg	storage Temperature Range	-55 ~ +150	°C

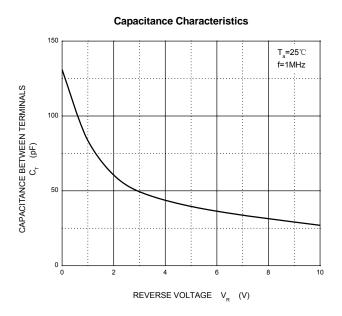
#### **ELECTRICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)**

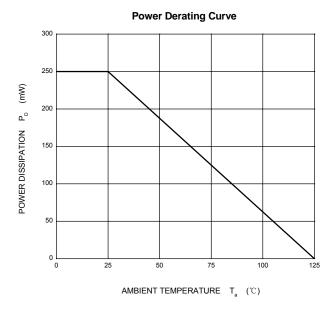
Parameter	Symbol	Symbol Test conditions		Тур	Max	Unit
Maximum instantaneous forward voltage	$V_{F}$	I <sub>F</sub> =1A			0.7	V
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	V <sub>R</sub> =60V			0.1	mA
Total capacitance	C <sub>tot</sub>	V <sub>R</sub> =4V,f=1MHz			120	pF

# **Typical Characteristics**



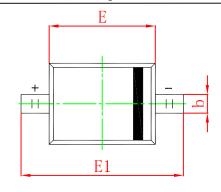


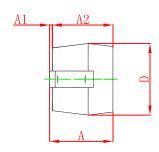


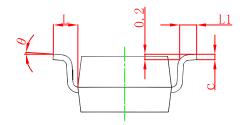


# PACKAGE OUTLINE AND PAD LAYOUT INFORMATION

# SOD-323 Package Outline Dimensions

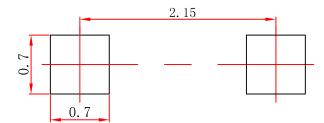






Cymhal	Dimensions	In Millimeters	Dimensions In Inches			
Symbol	Min	Max	Min	Max		
Α		1.100		0.043		
A1	0.000	0.100	0.000	0.004		
A2	0.800	1.000	0.031	0.039		
b	0.250	0.350	0.010	0.014		
С	0.080	0.150	0.003	0.006		
D	1.200	1.400	0.047	0.055		
E	1.600	1.800	0.063	0.071		
E1	2.500	2.750	0.098	0.108		
L	0.475	REF	0.019	REF		
L1	0.250	0.400	0.010	0.016		
θ	0°	8°	0°	8°		

### SOD-323 Suggested Pad Layout



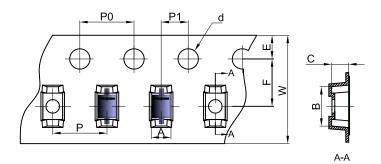
#### Note:

- 1. Controlling dimension:in millimeters.
- 2.General tolerance:± 0.05mm.
- 3. The pad layout is for reference purposes only.

#### NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

### SOD-323 Embossed Carrier Tape

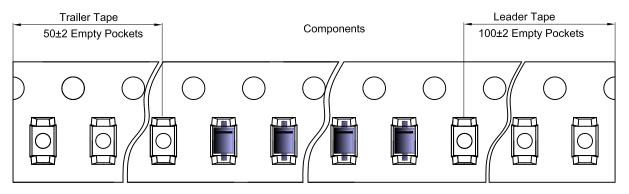


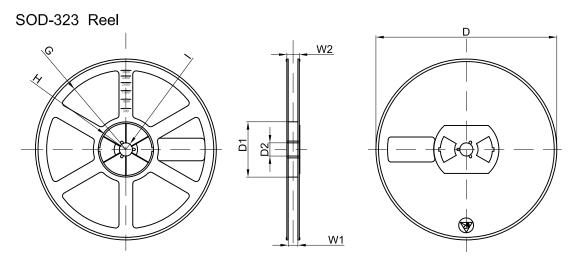
#### Packaging Description:

SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	Pkg type A B C d E F P0 P P1 W									
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

# SOD-323 Tape Leader and Trailer





Dimensions are in millimeter									
Reel Option	D	D1	D2	G	Н	I	W1	W2	
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30	

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	