

DO-27 Plastic-Encapsulate Diodes

SB3150 THRU SB3200

Schottky Rectifier Diode

Features

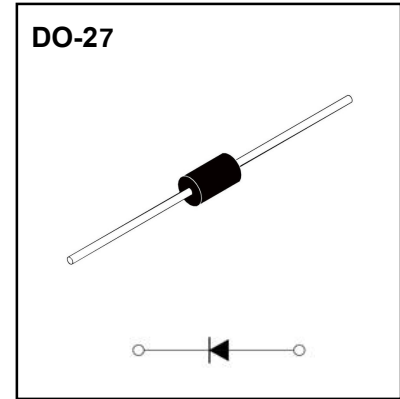
- $I_{F(AV)}$ 3A
- V_{RRM} 150V-20V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage

Applications

- Rectifier

Marking

- SB3150/SB3200



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SB3	
				150	200
Repetitive Peak Reverse Voltage	V_{RRM}	V		150	200
Maximum RMS Voltage	V_{RMS}	V		105	140
Maximum DC Blocking Voltage	V_{DC}	V		150	200
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=100^\circ\text{C}$	3.0	
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , $T_a=25^\circ\text{C}$	80	
Junction Temperature	T_J	$^\circ\text{C}$		-55~+150	
Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150	

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

Item	Symbol	Unit	Test Condition	SB3	
				150	200
MaximumPeak Forward Voltage	V_{FM}	V	$I_{FM}=3.0\text{A}$	0.85	0.95
MaximumPeak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$ $T_a=25^\circ\text{C}$	0.1	
	I_{RRM2}		$T_a=100^\circ\text{C}$	2.0	
Typical Junction Capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	160	
Typical Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient	40	
	$R_{\theta J-L}$		Between junction and lead	20	

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

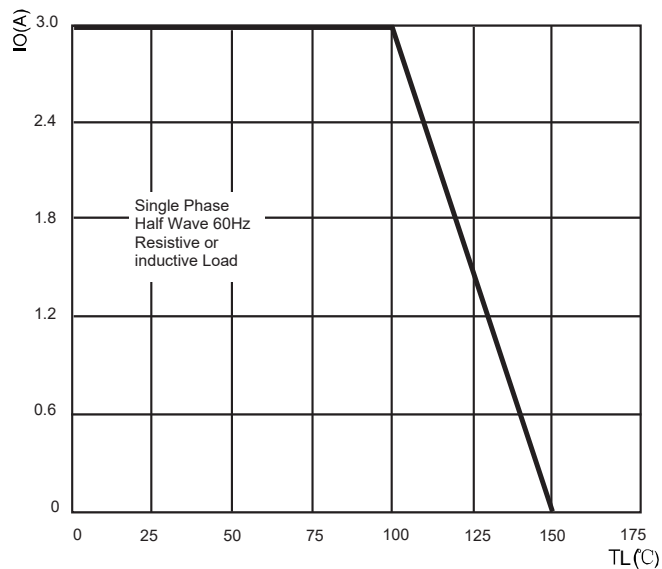


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

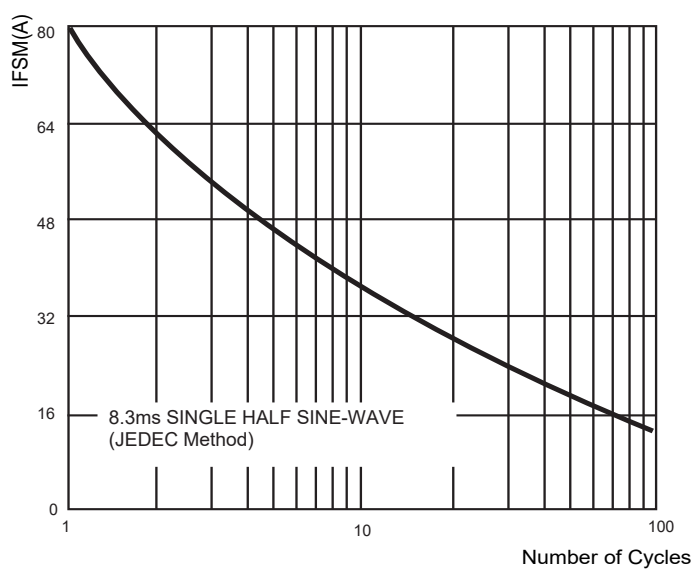


FIG.3: TYPICAL FORWARD CHARACTERISTICS

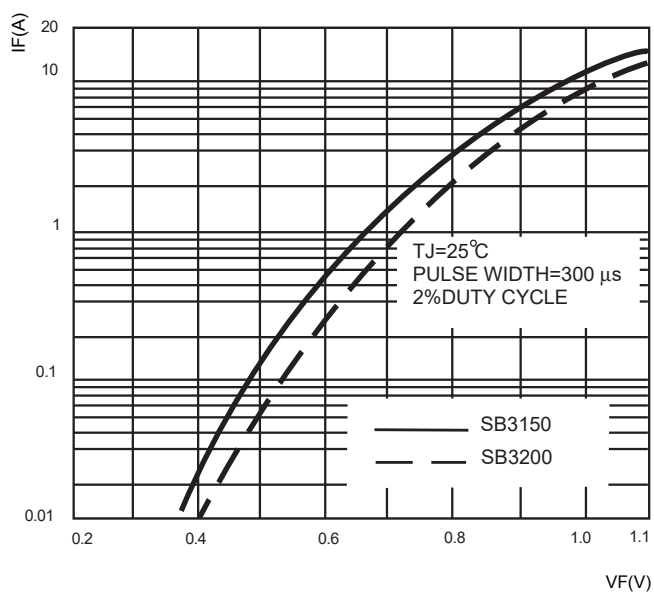
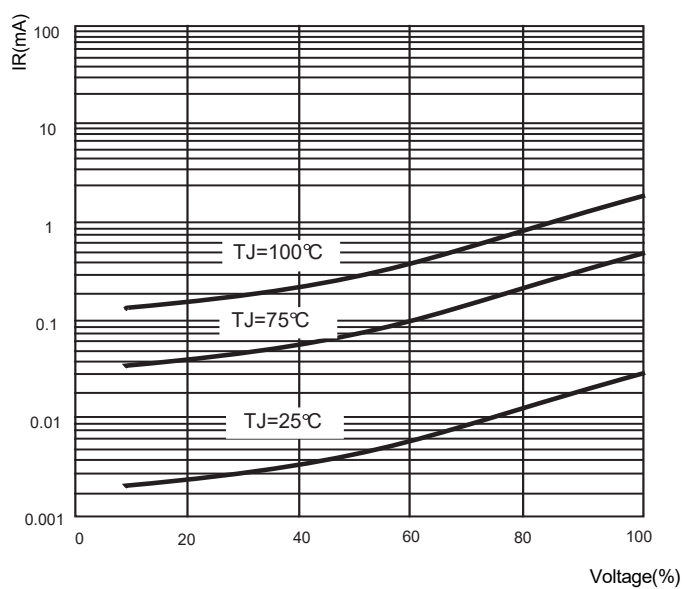
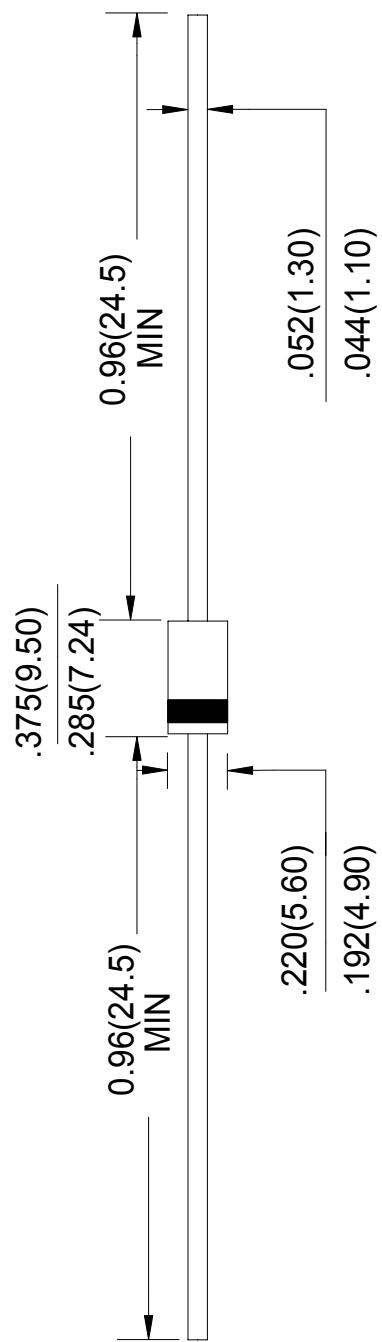


FIG.4: TYPICAL REVERSE CHARACTERISTICS





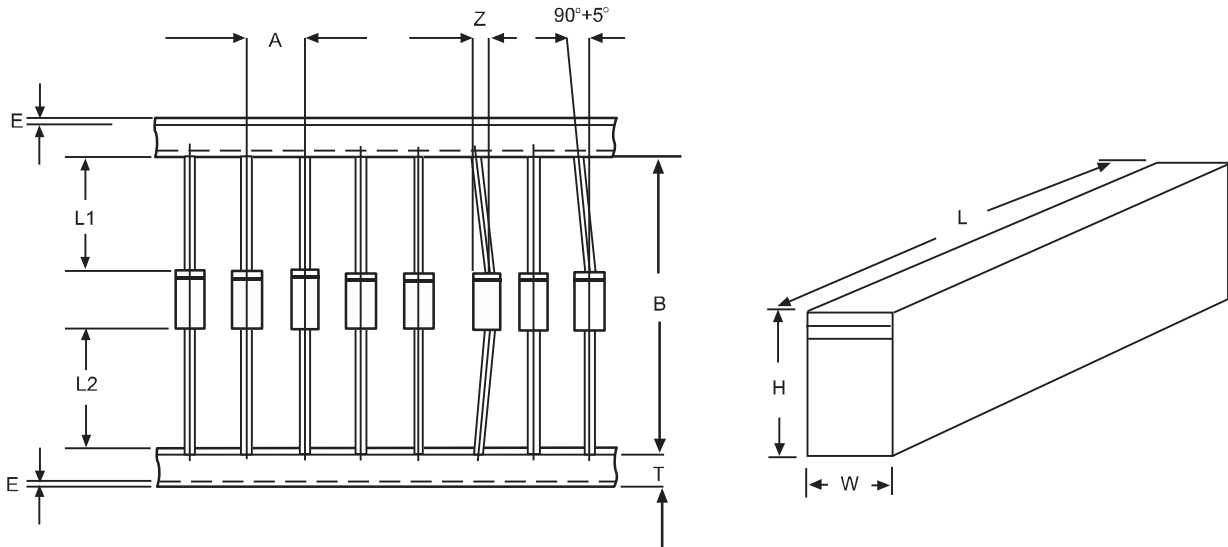
Unit: in inches (millimeters)

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.

Ammo Box Packaging Specifications For Axial Lead Rectifiers

Axial lead devices are packed in accordance with EIA standard RS-296-D and specifications given below

COMPONENT OUTLINE	COMPONENT PITCH A	INNER TAPE PITCH B	CUMULATIVE PITCH TOLERANCE
	±0.5mm(.020``)	+0.5mm(.020``)	
R-1	5.0mm	26.0mm	2.0mm/20pitch
R-1	5.0mm	52.4mm	2.0mm/10pitch
A-405	5.0mm	26.0mm	2.0mm/20pitch
A-405	5.0mm	52.4mm	2.0mm/10pitch
DO-34/DO-35	5.0mm	26.0mm	2.0mm/20pitch
DO-34/DO-35	5.0mm	52.4mm	2.0mm/10pitch
DO-41	5.0mm	26.0mm	2.0mm/20pitch
DO-41	5.0mm	52.4mm	2.0mm/10pitch
DO-15	5.0mm	52.4mm	2.0mm/10pitch
DO-27	10.0mm	52.4mm	2.0mm/10pitch
R-6	10.0mm	52.4mm	2.0mm/10pitch



ITEM	SYMBOL	SPECIFICATIONS(mm)	SPECIFICATIONS(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	IL1-L2I	1.0max	0.040max
Box length	L	255.0±5.0	10.04±0.197
Box width	W	78.0±5.0	3.07±0.197
Box height	H	150.0±5.0	5.91±0.197

NOTE:Each component lead shall be sandwiched between tapes for A minimum of 3.2mm(0.126``)