

DO-27 Plastic-Encapsulate Diodes

SB320 THRU SB3100 Schottky Rectifier Diodes

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 20V-100V
- High surge current capability
- Polarity: Color band denotes cathode

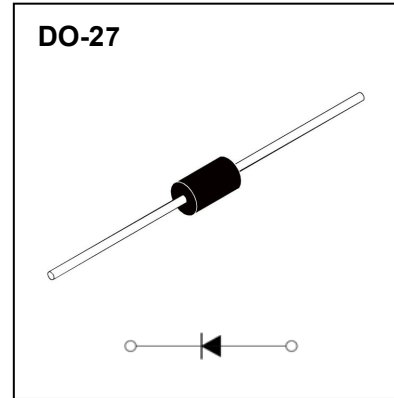
Applications

- Rectifier

Marking

- SB3XX

X : From 20 To 100



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	SB3						
				20	30	40	50	60	80	100
Repetitive Peak Reverse Voltage	V _{RRM}	V		20	30	40	50	60	80	100
MaximumRMS Voltage	V _{RMS}	V		14	21	28	35	42	56	70
Maximum DC Blocking Voltage	V _{DC}	V		20	30	40	50	60	80	100
Average Forward Current	I _{F(AV)}	A	60Hz Half-sine wave, Resistance load,TL(Fig.1)	3.0						
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave , 1 cycle , Ta =25℃	80						
Junction Temperature	T _J	℃		-55~+125			-55 ~ +150			
Storage Temperature	T _{STG}	℃		-55 ~ +150						

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

Item	Symbol	Unit	Test Condition		SB3					
					20	30	40	50	60	80
Maximum Peak Forward Voltage	V _{FM}	V	I _{FM} =3.0A		0.55			0.7		0.85
Maximum Peak Reverse	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25°C	0.1					
	T _a =125°C			10						
Typical junction capacitance	C _J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.		250			160		
Typical Thermal Resistance	R _{θJ-A}	°C /W	Between junction and ambient		40					
	R _{θJ-L}		Between junction and lead		20					

Notes:

1) Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

Typical Characteristics

FIG.1 FORWARD CURRENT DERATING CURVE

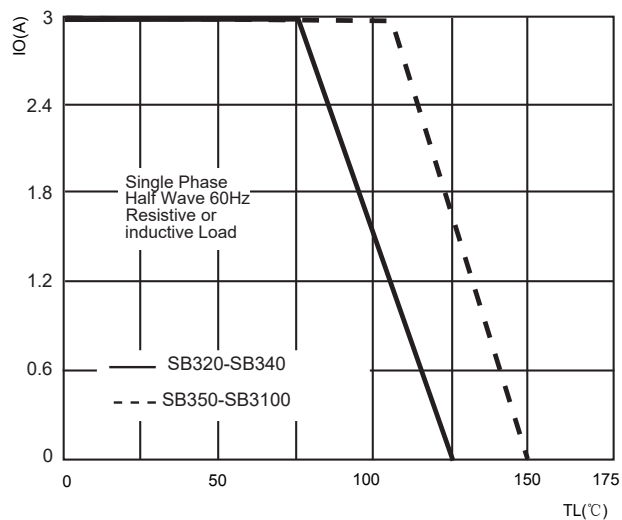


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

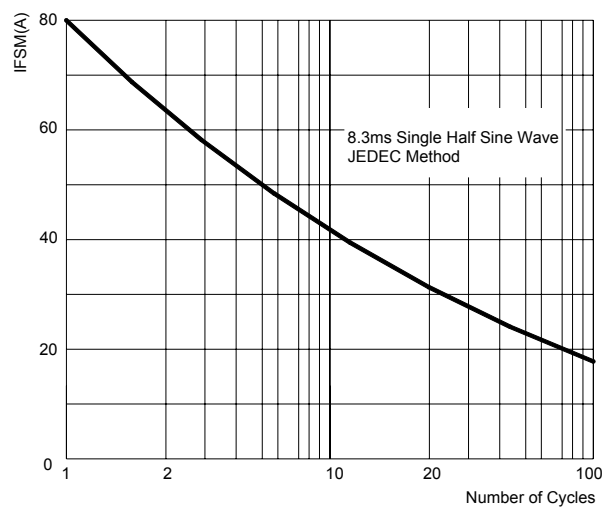


FIG.3: TYPICAL FORWARD CHARACTERISTICS

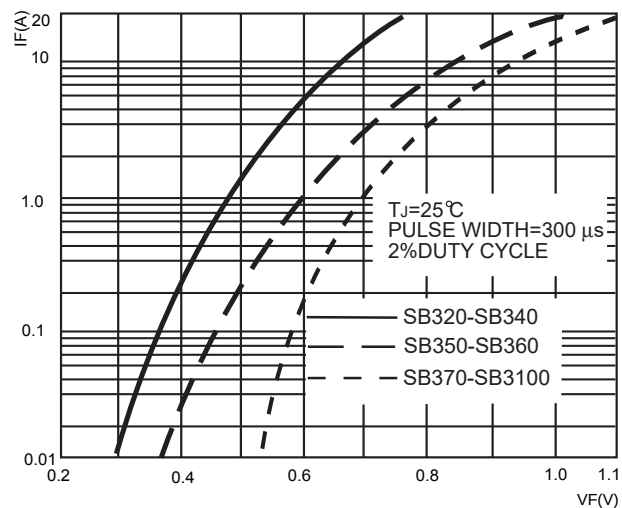
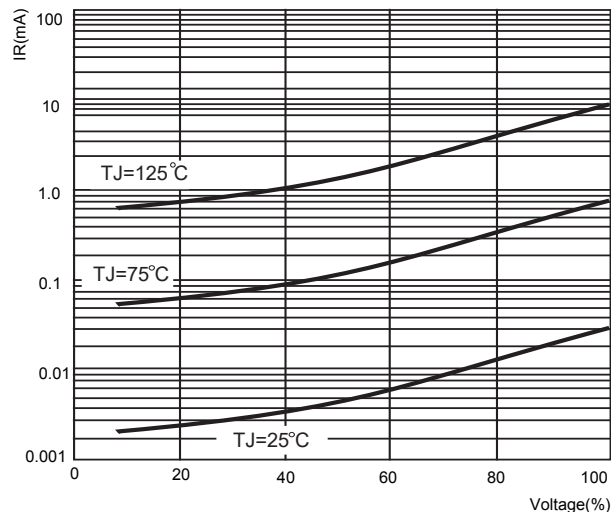
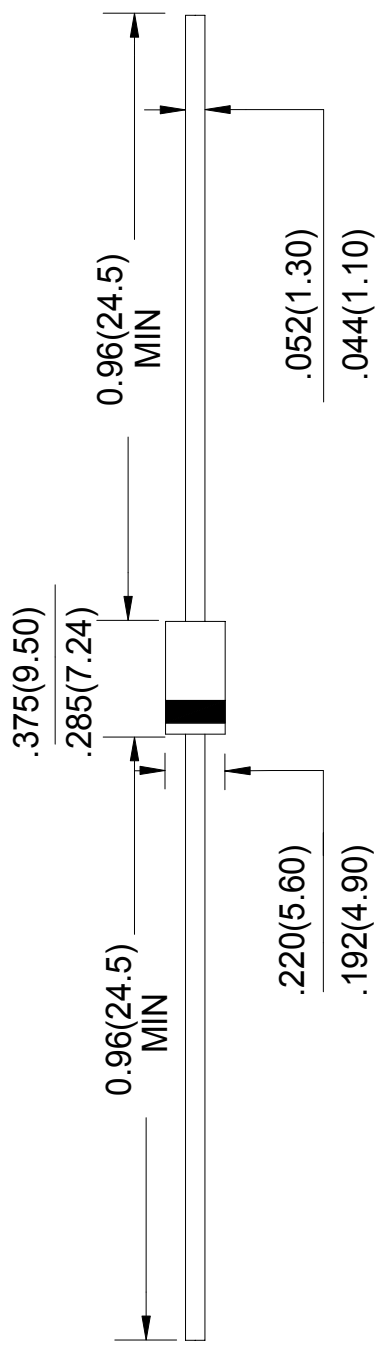


FIG.4: TYPICAL REVERSE CHARACTERISTICS





Unit: in inches (millimeters)

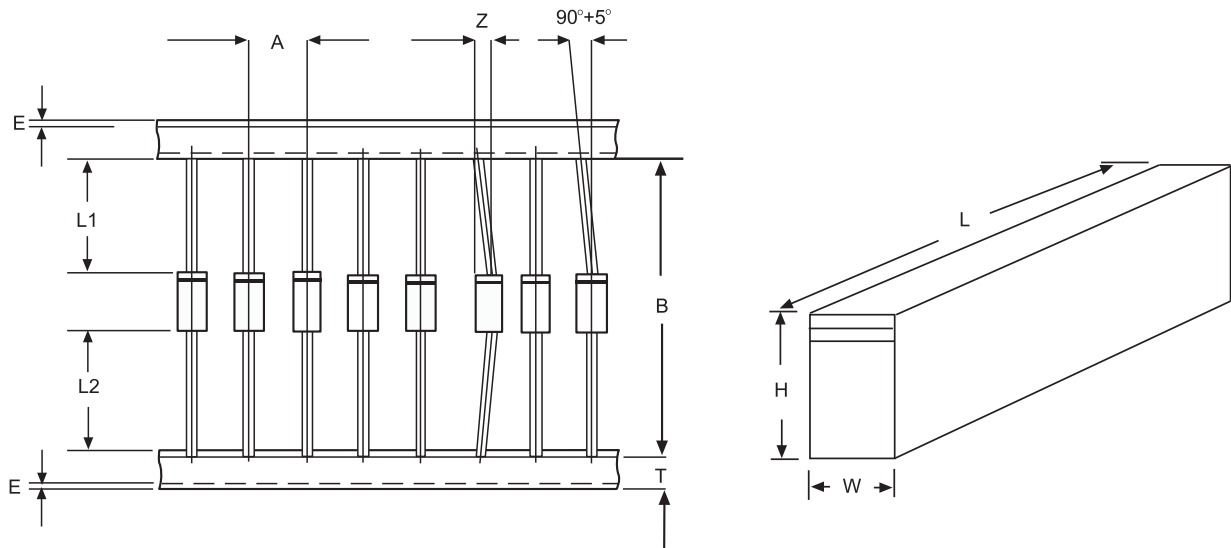
NOTICE

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
	$\pm 0.5\text{mm}(.020'')$	$+0.5\text{mm}(.020'')$	
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'')