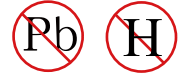




YEA SHIN TECHNOLOGY CO., LTD

SB2150 THRU SB2200

SCHOTTKY BARRIER RECTIFIERS



VOLTAGE 150 to 200 Volts CURRENT - 2.0 Ampere

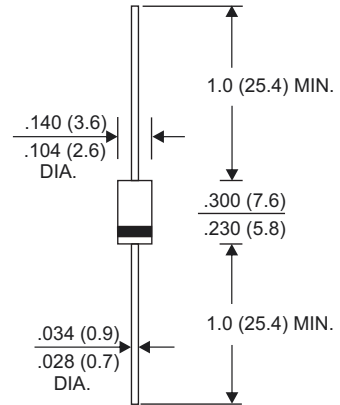
FEATURES

- Axial lead type devices for through hole design.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

MECHANICAL DATA

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-204AC / DO-15
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity : Color band denotes cathode end

DO-15(DO-204AC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.

Parameter	Symbol	SB2150	SB2200	UNIT
Making code		SB2150	SB2200	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	200	V
Maximum RMS Voltage	V_{RMS}	105	140	
Maximum DC Blocking Voltage	V_{DC}	150	200	
Maximum Instantaneous Forward Voltage@2.0A, $T_A = 25^\circ C$	V_F	0.87	0.90	V
Operating Temperature	T_J	-55 ~ +150		°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_o			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			50	A
Reverse current	$V_R = V_{RRM} T_A = 25^\circ C$	I_R			0.5	mA
	$V_R = V_{RRM} T_A = 100^\circ C$				20	
Thermal resistance	Junction to ambient	$R_{\theta JA}$		50		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		30		pF
Storage temperature		T_{STG}	-55		+150	°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient .

DEVICE CHARACTERISTICS

SB2150 THRU SB2200

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

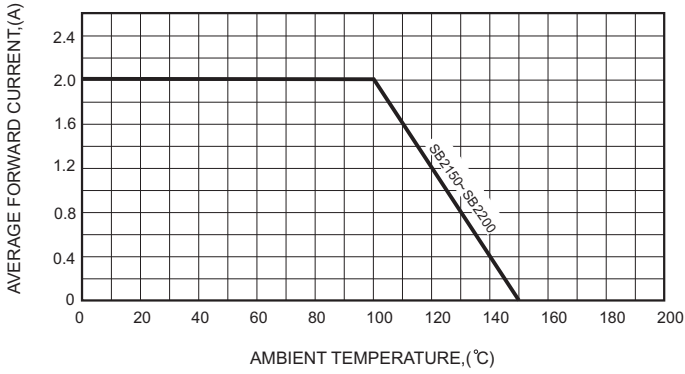


FIG.2-TYPICAL FORWARD CHARACTERISTICS

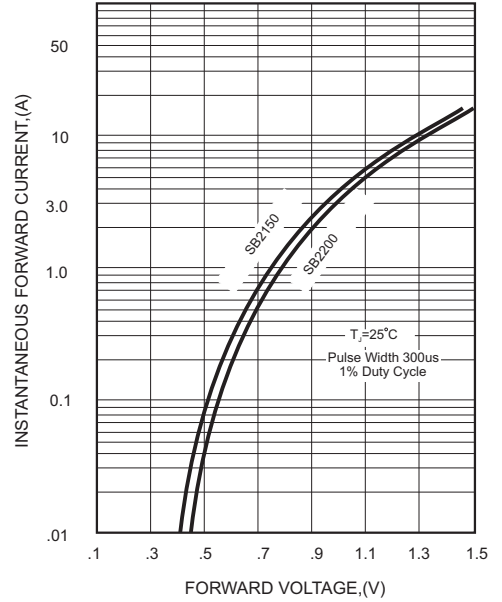


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

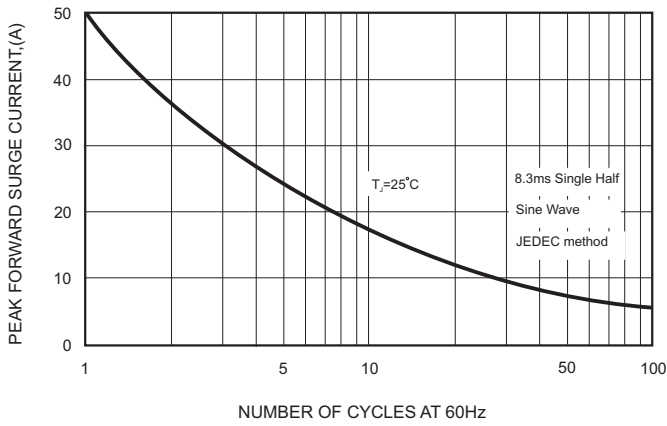


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

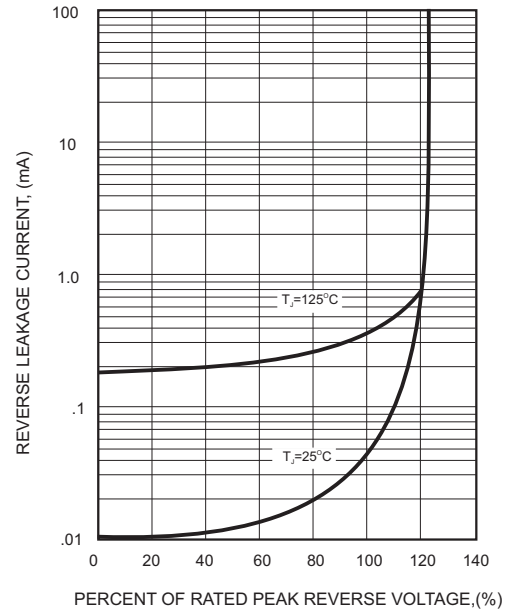


FIG.4-TYPICAL JUNCTION CAPACITANCE

