

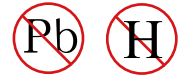


YEA SHIN TECHNOLOGY CO., LTD

SB1020FCT THRU SB10200FCT

10A SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 200 Volts CURRENT - 10 Amperes

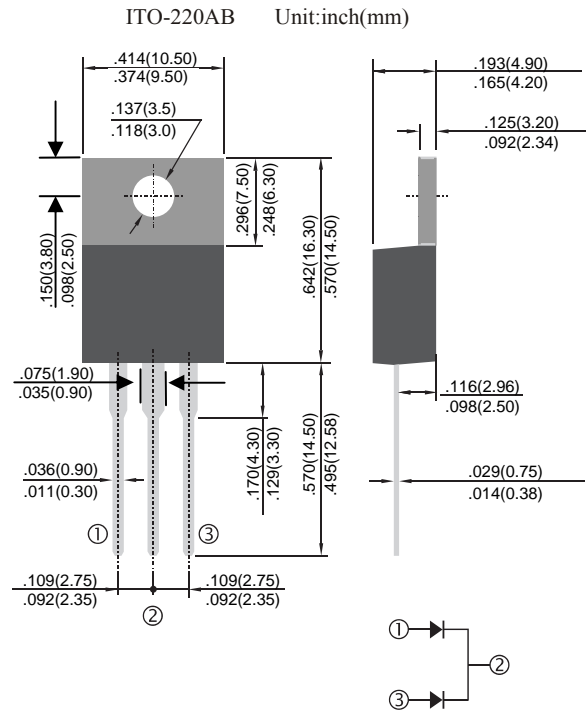


## FEATURES

- Schottky Barrier Chip
- Guard Ring for Transient Protection
- High Current Capability, Low Forward
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability
- Classification 94V-0
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

## MECHANICAL DATA

- Case: ITO-220AB Molded Plastic
- Terminals: Plated Leads Solderable per
- MIL-STD-750, Method 2026
- Polarity: As Marked on Body
- Mounting Position: Any



## Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	SB 1020FCT	SB 1030FCT	SB 1040FCT	SB 1050FCT	SB 1060FCT	SB 1080FCT	SB 10100FCT	SB 10150FCT	SB 10200FCT	Units
Peak Repetitive Reverse Voltage	VRRM										
Working Peak Reverse Voltage	VRWM	20	30	40	50	60	80	100	150	200	Volts
DC Blocking Voltage	VR										
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	70	105	140	Volts
Average Rectified Output Current @TC = 95°C	IF	10									Amps
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150							120		Amps
Forward Voltage @IF = 5.0A	VF	0.55			0.75		0.85		0.90	0.95	Volts
Peak Reverse Current @TA = 25°C	IRM	0.5							0.1		mA
At Rated DC Blocking Voltage @TA = 100°C		50							7		
Typical Junction Capacitance (Note 1)	Cj	700									pF
Operating and Storage Temperature Range	Tj, TSTG	-55 to +150									

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

# DEVICE CHARACTERISTICS

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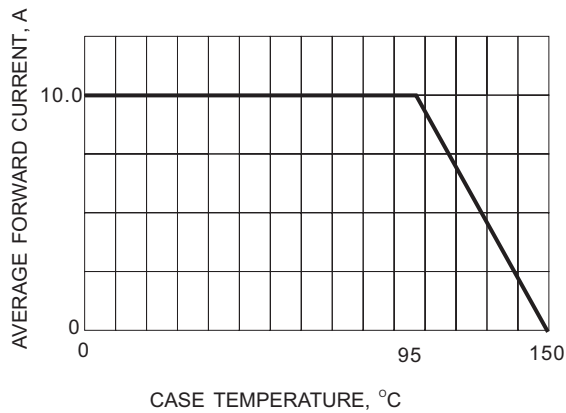


Fig.1- FORWARD CURRENT DERATING CURVE

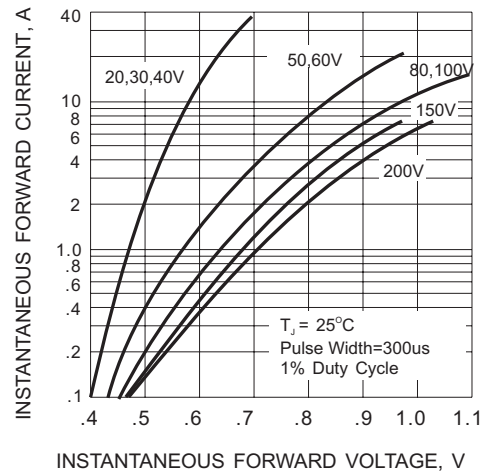


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

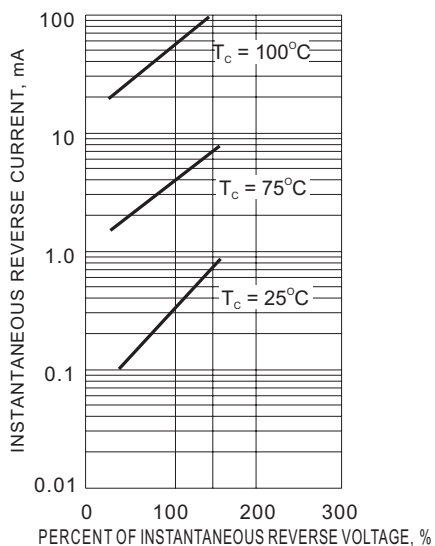


Fig.3- TYPICAL REVERSE CHARACTERISTIC

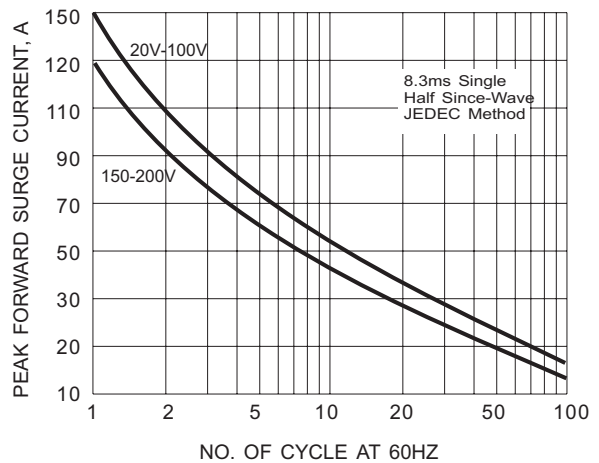


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

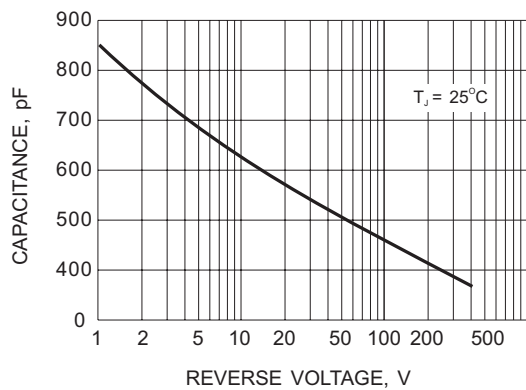


Fig.5- TYPICAL JUNCTION CAPACITANCE