



YEA SHIN TECHNOLOGY CO., LTD SB2040CT THRU SB20200CT
20 AMPERE SCHOTTKY BARRIER RECTIFIERS
VOLTAGE - 40 to 200 Volts CURRENT - 20.0 Amperes

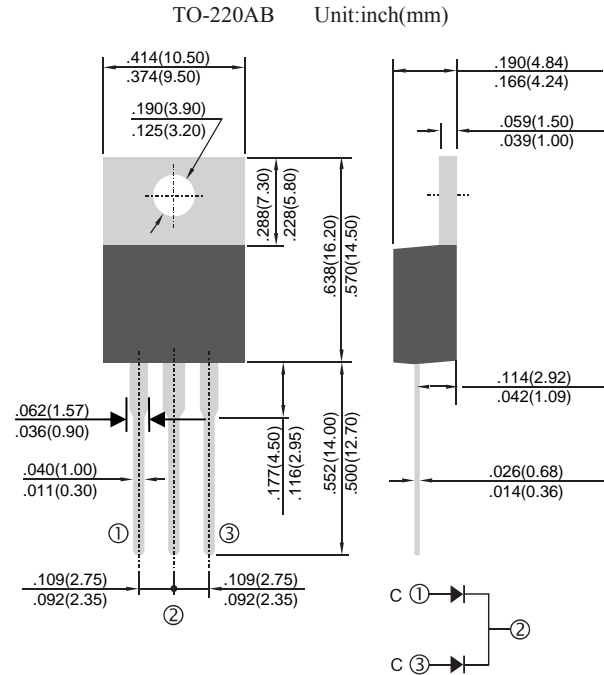


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: TO-220AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any



Maximum Rating and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	SB2040CT	SB2045CT	SB2050CT	SB2060CT	SB2080CT	SB2090CT	SB20100CT	SB20150CT	SB20200CT	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See figure 1)	$I_{F(AV)}$	20									A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150									A
Maximum Forward Voltage at 10A, per leg	V_F	0.65	0.8		0.85			0.92			V
Maximum Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	I_R	0.05 20									mA
Typical Junction Capacitance (Note 1)	C_J	700	500		400			300	250		pF
Typical Thermal Resistance	$R_{\theta JC}$	9									$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							-55 to +175		$^\circ\text{C}$

Note:
 1. Measured at 1.0MHz and applied reverse voltage of 4.0Vdc.

DEVICE CHARACTERISTICS

SB2040CT THRU SB20200CT

