



# DATA SHEET

## SB1620CT~SB16100CT

### SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 100 Volts **CURRENT** 16 Amperes

TO-220AB

Unit : inch (mm)

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

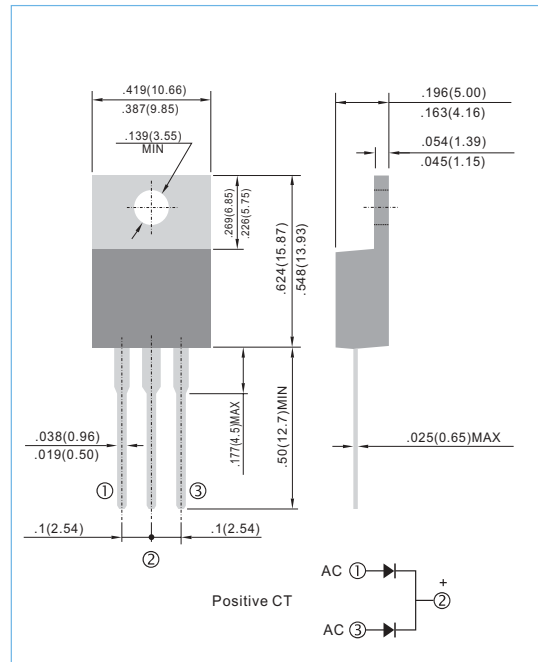
Case: TO-220AB molded plastic package

Terminals: Lead solderable per MIL-STD-202G, Method 208

Polarity: As marked.

Mounting Position: Any

Weight: 0.08 ounces, 2240mg



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

For capacitive load, derate current by 20%.

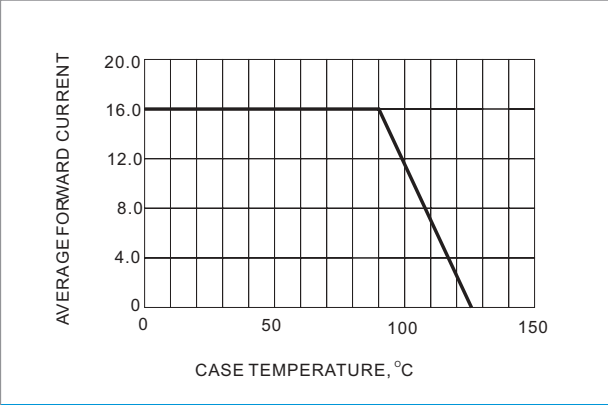
PARAMETER	SYMBOL	SB1620CT	SB1630CT	SB1640CT	SB1645CT	SB1650CT	SB1660CT	SB1680CT	SB16100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	45	50	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	45	50	60	80	100	V
Maximum Average Forward Current .375" (9.5mm) lead length at $T_c = 90$	$I_{AV}$	16								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 8.0A, per leg	$V_F$	0.55				0.75		0.85		V
Maximum DC Reverse Current $T_A=25$ at Rated DC Blocking Voltage $T_A=100$	$I_R$					0.5 100				mA
Typical Thermal Resistance	$R_{\theta JC}$	2								/ W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-50 TO +125								

NOTES:

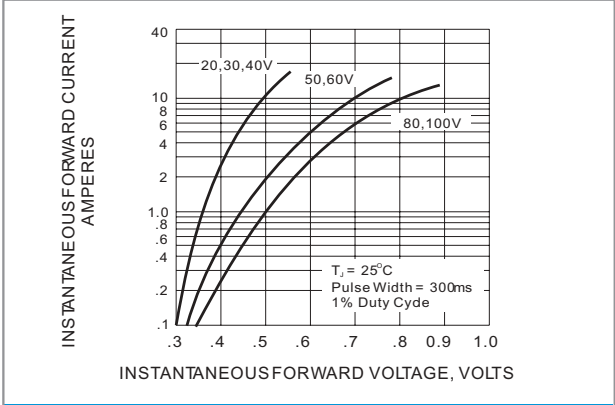
Both Bonding and Chip structure are available.



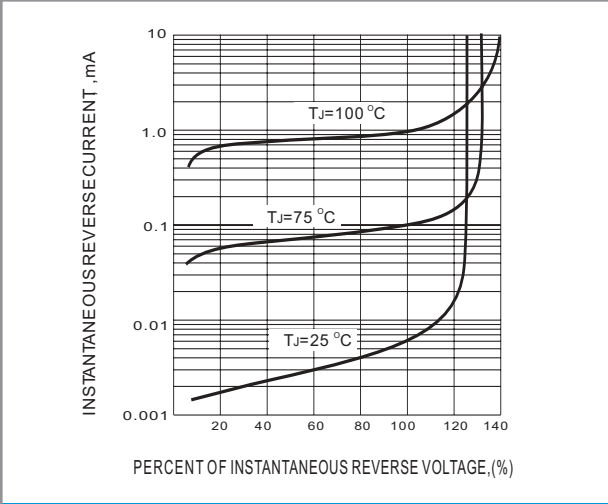
**RATING AND CHARACTERISTIC CURVES**



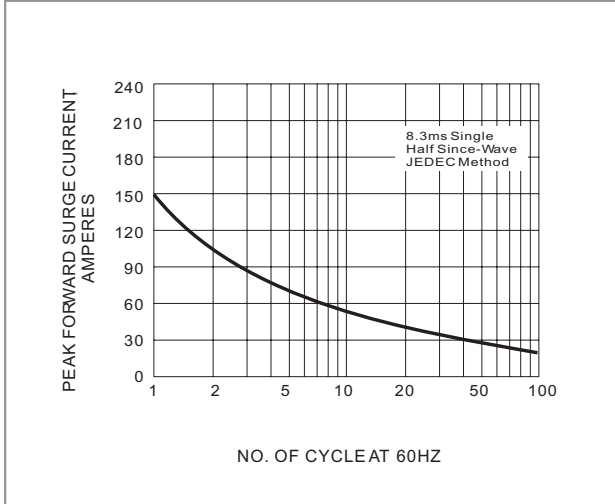
**Fig. 1- FORWARD CURRENT DERATING CURVE**



**Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig. 3- TYPICAL REVERSE CHARACTERISTIC**



**Fig. 4- MAXIMUM NON-REPETITIVE SURGE CURRENT**