

DATA SHEET

SB2520CT~SB25100CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts **CURRENT** 25 Amperes

TO-220AB

Unit : inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. 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.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

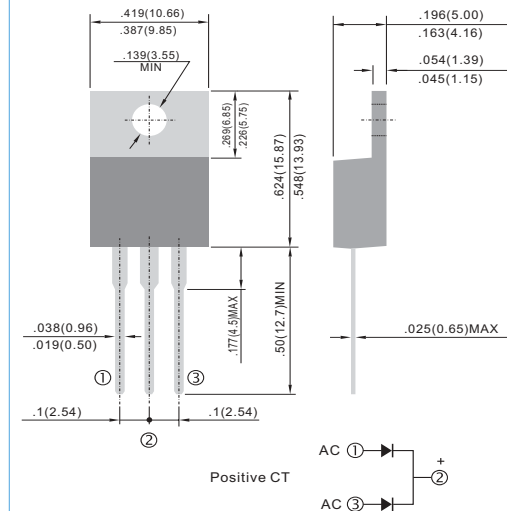
Case: TO-220AB Molded plastic

Terminals: Solder plated, solderable per MIL-STD-202, Method 208

Polarity: As marked.

Standard packaging: Any

Weight: 0.08 ounces, 2.24grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SB2520CT	SB2530CT	SB2540CT	SB2550CT	SB2560CT	SB2580CT	SB25100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Current .375"(9.5mm) lead length at Tc =90 °C	I _{AV}	25.0							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	200							A
Maximum Forward Voltage at 12.5A, per leg	V _F	0.55			0.75		0.85		V
Maximum DC Reverse Current TA=25 °C at Rated DC Blocking Voltage TA=100°C	I _R	0.5 100							mA
Typical Thermal Resistance	RθJC	2							°C / W
Operating Junction Temperature Range	T _J	-50 TO +125							°C
Storage Temperature Range	T _{STG}	-50 TO +150							°C

NOTES:

Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

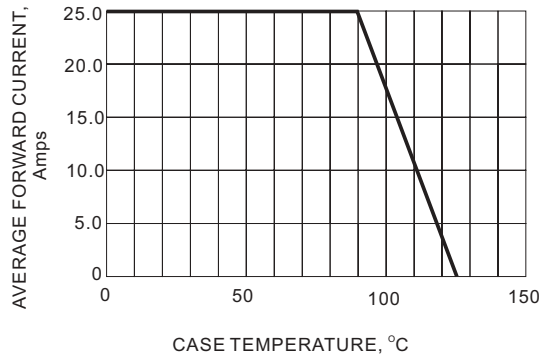


Fig. 1- FORWARD CURRENT DERATING CURVE

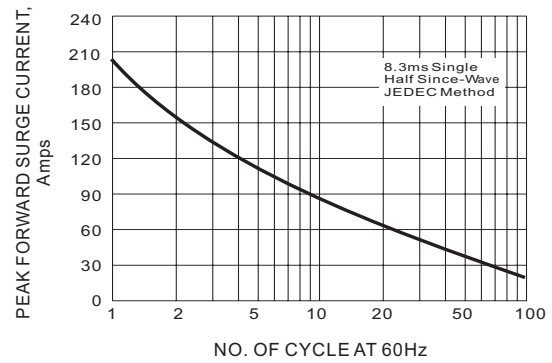


Fig. 2- MAXIMUM NON - REPETITIVE SURGE CURRENT

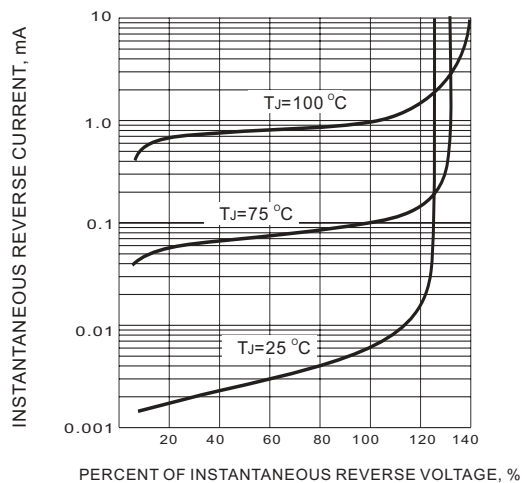


Fig. 3- TYPICAL REVERSE CHARACTERISTICS

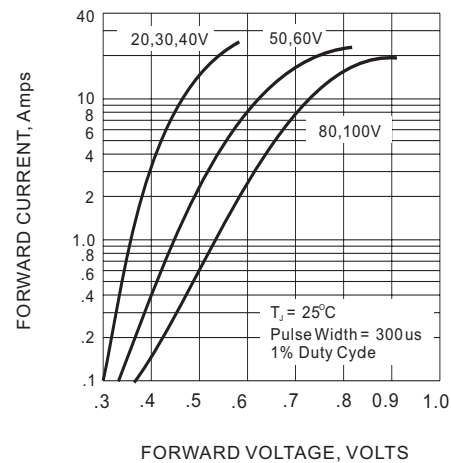


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS