

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 20 to 100 Volts
FORWARD CURRENT - 10.0 Amperes

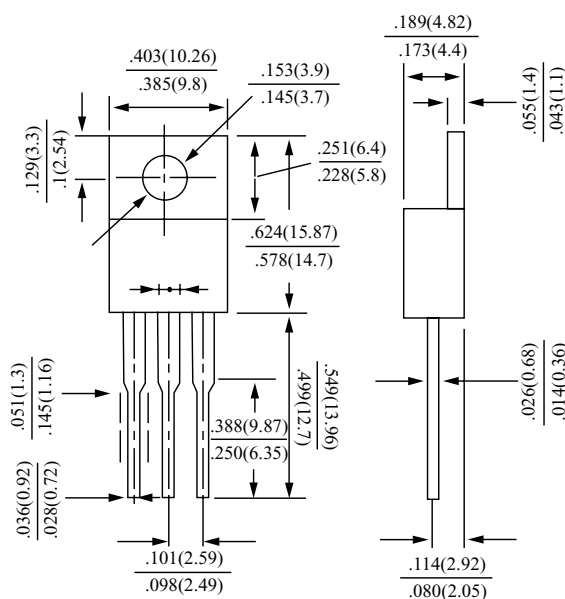
FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case : TO-220AB molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.9 grams
- Mounting position : Any

TO-220AB



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	SB 1020CT	SB 1040CT	SB 1050CT	SB 1060CT	SB 1080CT	SB 10100CT	UNIT
Maximum repetitive peak reverse voltage	VRRM	20	40	50	60	80	100	V
Maximum RMS voltage	VRMS	14	28	35	42	56	70	V
Maximum DC blocking voltage	VDC	20	40	50	60	80	100	V
Maximum average forward rectified current (Per leg)	IF	10.0 5.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	100.0						A
Maximum instantaneous IF=5A @25°C Forward Voltage IF=5A @100°C	VF	0.55 0.52		0.70 0.60		0.85 0.70		V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	IR	0.5 20.0				0.2 5.0		mA
Typical Junction Capacitance	Cj	250		200		150		pF
Typical Thermal Resistance	RθJC	3						°C/W
Operating Temperature Range	Tj	-55 to +125						°C
Storage Temperature Range	TSTG	-55 to +150						°C

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

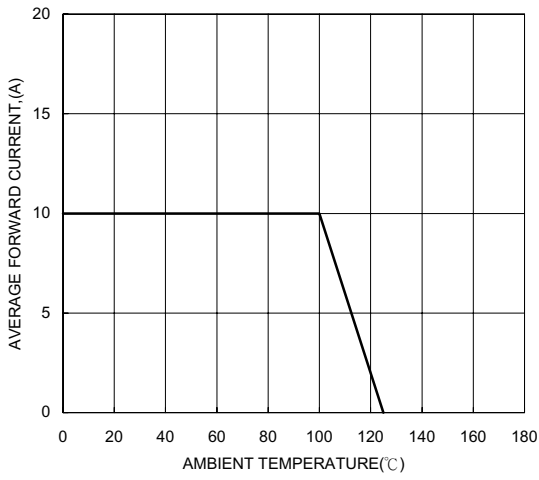


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

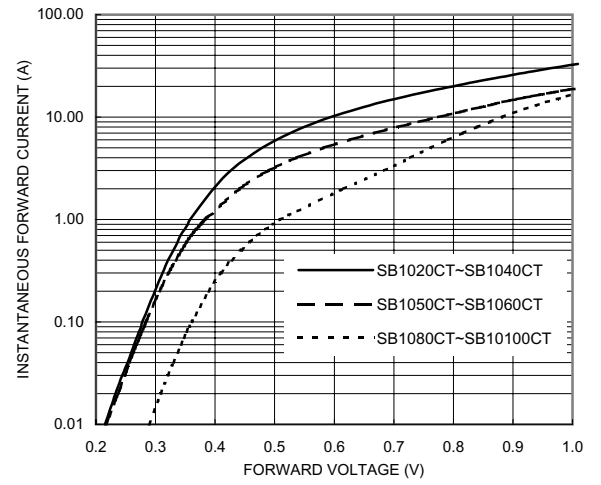


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

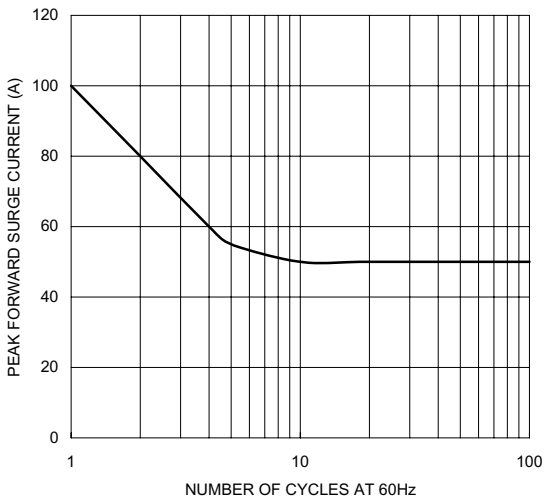


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

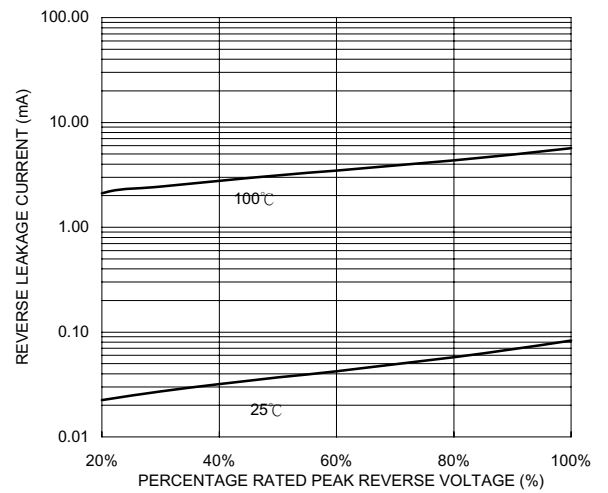


FIG. 5-TYPICAL JUNCTION CAPACITANCE

