

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 45.0 Volts
FORWARD CURRENT - 20.0 Amperes

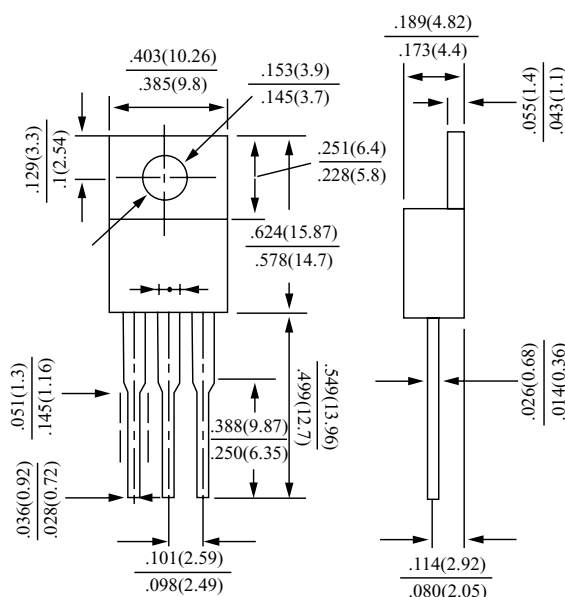
FEATURES

- 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 : 1.948 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	S20C45CT	UNIT
Maximum repetitive peak reverse voltage	VRRM	45	V
Maximum RMS voltage	VRMS	32	V
Maximum DC blocking voltage	VDC	45	V
Maximum average forward rectified current Per leg	IF	20.0 10.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	150.0	A
Maximum instantaneous IF=10A @25°C @100°C	VF	0.60 0.55	V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	IR	0.5 30.0	mA
Typical Junction Capacitance	CJ	450	pF
Typical Thermal Resistance	RθJC	3	°C/W
Operating Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	TSTG	-55 to +175	°C

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

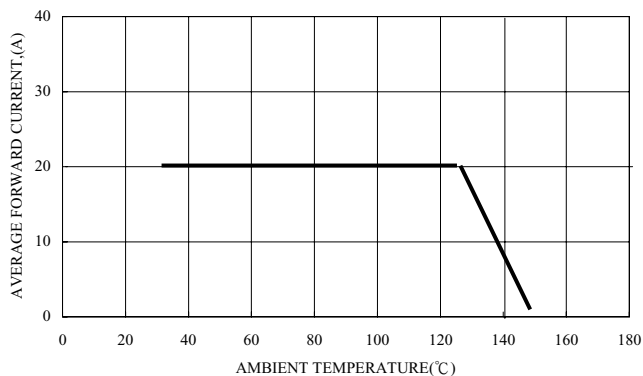


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

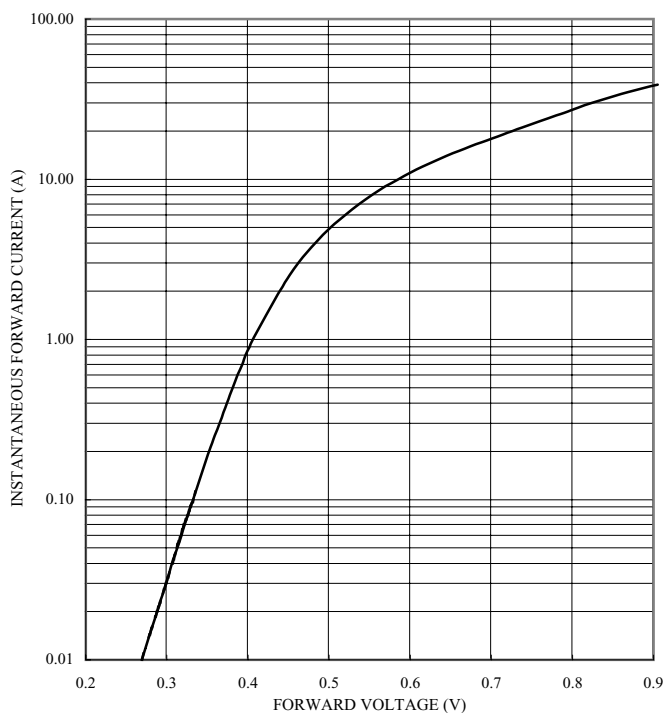


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

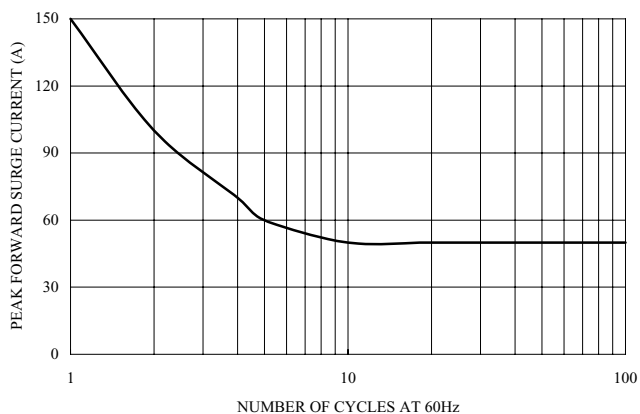


FIG. 5-TYPICAL REVERSE CHARACTERISTICS

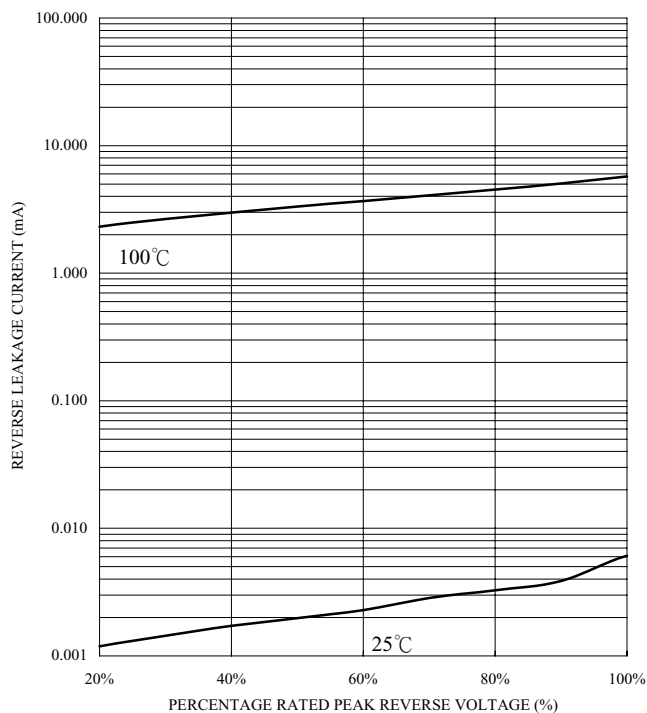


FIG. 4-TYPICAL JUNCTION CAPACITANCE

