

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20 --- 200 V
CURRENT:16.0A

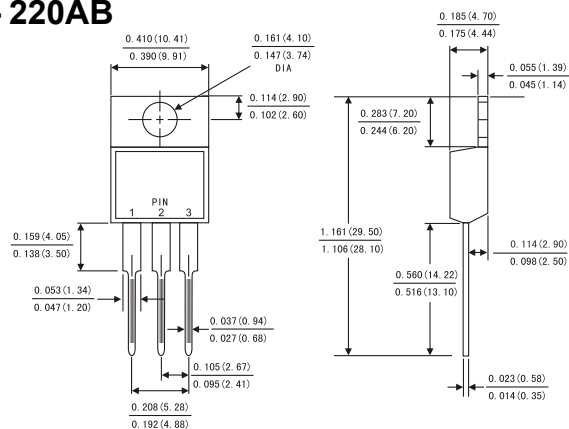
FEATURES

- ◇ Metal-semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop, low switching losses
- ◇ High surge capability
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC TO-220AB, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.08 ounces, 2.24 grams
- ◇ Mounting position: Any

TO - 220AB



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 by 20%.

		Symbols	SR 1620CT	SR 1630CT	SR 1640CT	SR 1650CT	SR 1660CT	SR 1680CT	SR 16A0CT	SR 16150CT	SR 16200CT	Units
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage		V _{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I _(AV)	8.0 16.0									Amps
	Total device											
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	200.0									Amps
Maximum instantaneous forward voltage at 16.0 A		V _F	0. 60			0.75		0.85		0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _c =25°C	I _R	0.2									mA
	T _c =125°C		30			50						
Typical thermal resistance (Note 2)		R _{θJC}	3.0									°C/W
Operating junction temperature range		T _J	-65 to +150									°C
Storage temperature range		T _{STG}	-65 to +150									°C

NOTE: 1. Pulse test: 300us pulse width, 1% duty cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to ambient

FIG.1-FORWARD CURRENT DERATING CURVE

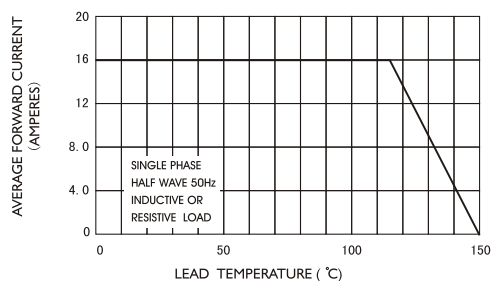


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

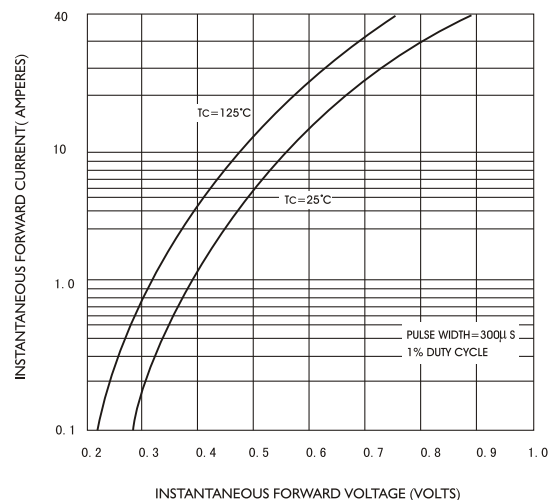


FIG.4-TYPICAL JUNCTION CAPACITANCE

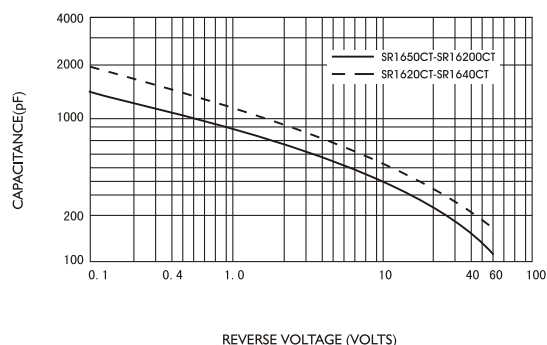


FIG.3-TYPICAL REVERSE CHARACTERISTICS

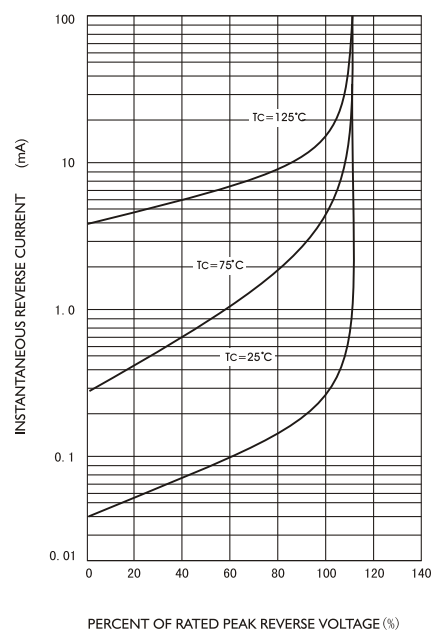


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

