SCHOTTKY BARRIER RECTIFIER
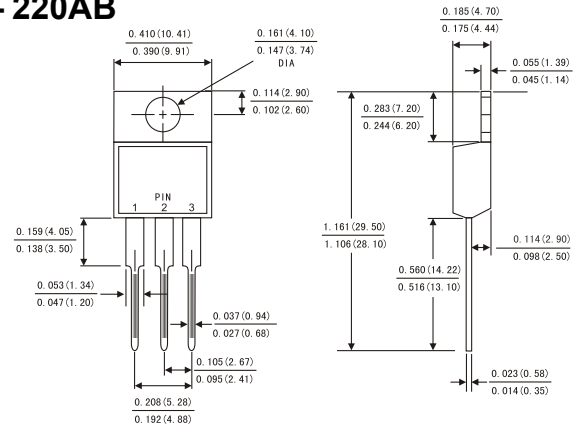
**VOLTAGE RANGE: 20 --- 200 V
CURRENT:16.0A**

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: 0.08ounces,2.24 grams
◇ Mounting position: Any

TO - 220AB

Dimensions in inches and (millimeters)
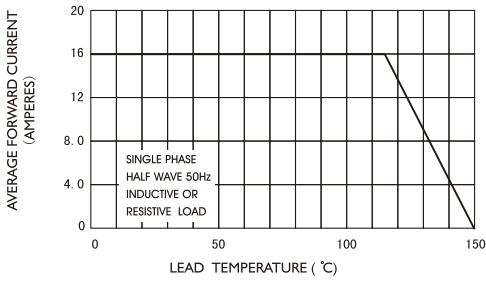
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

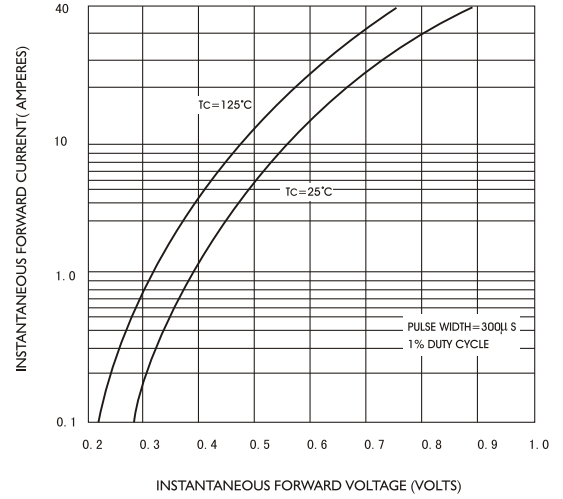Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

		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									Amps
	Total device		16.0									
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)	$T_c=25℃$	I_R	0.2									mA
	$T_c=125℃$		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.
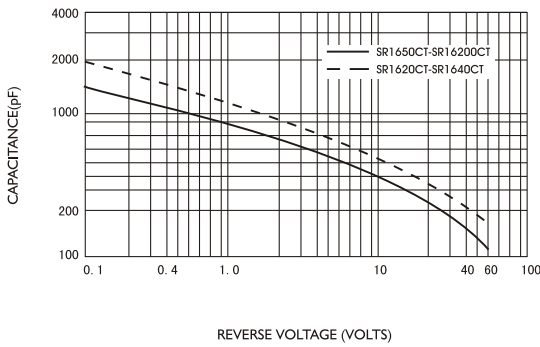
3.Thermal resistance junction to ambient
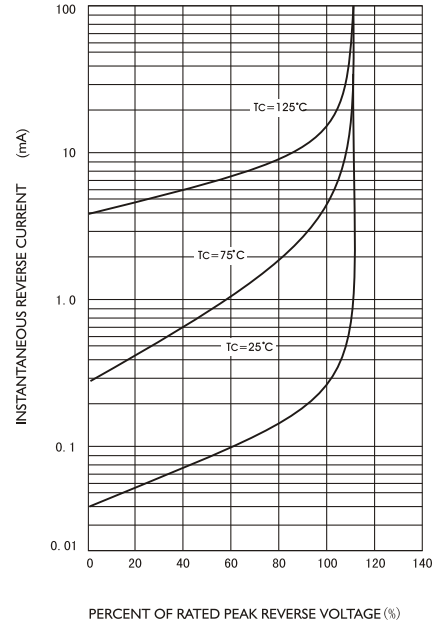
1.

FIG.1-FORWARD CURRENT DERATING CURVE

FIG.4-TYPICAL JUNCTION CAPACITANCE

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

FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

FIG.3-TYPICAL REVERSE CHARACTERISTICS

www.diode.co.kr