

# SR1520CT-SR1560CT

Dual Schottky Rectifiers

**REVERSE VOLTAGE: 20 - 60 V**

**FORWARD CURRENT: 15 A**



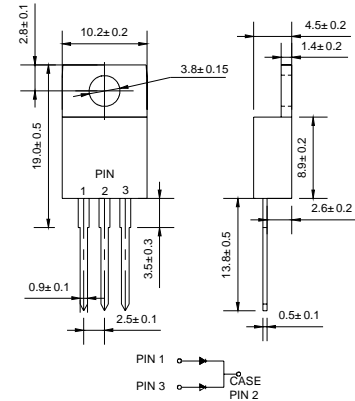
## TO-220AB

### Features

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

### Mechanical Data

- ◇ Case:JEDEC TO--220AB,molded plastic
- ◇ Polarity: As marked
- ◇ Weight: 0.08 ounce, 2.24 grams
- ◇ Mounting position: Any



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

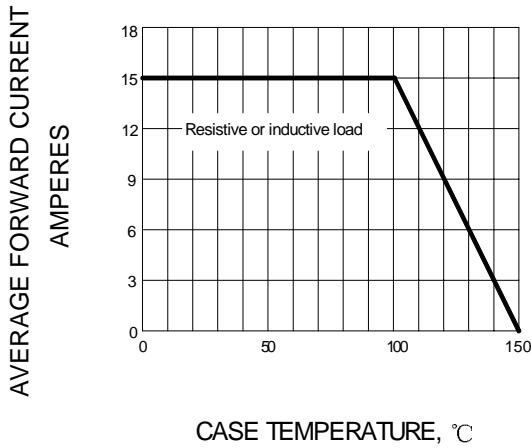
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		SR 1520CT	SR 1530CT	SR 1540CT	SR 1550CT	SR 1560CT	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	50	60	V
Working peak reverse voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	V
Maximum average forward rectified current @ $T_A=100^\circ\text{C}$	$I_{F(AV)}$	15.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) @ $T_A=125^\circ\text{C}$	$I_{FSM}$	200.0					A
Maximum instantaneous forward voltage per leg @ 7.5A (Note1)	$V_F$	0.65			0.75		V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	1.0 50.0					mA
Operating junction temperature range	$T_J$	-55 --- +150					°C
Storage temperature range	$T_{STG}$	-55 --- +150					°C

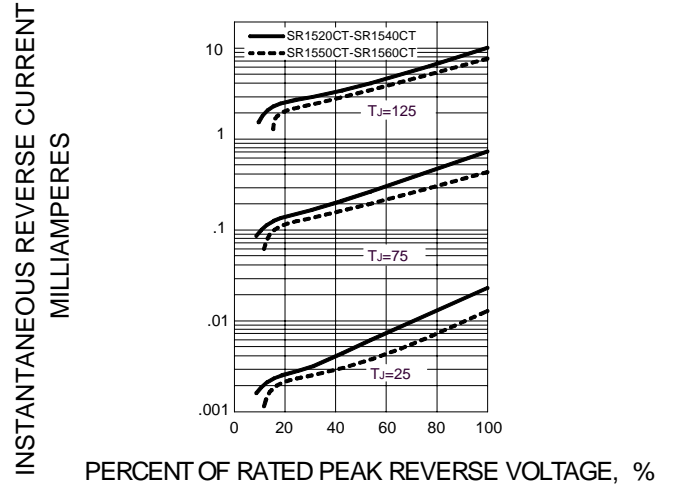
Note: 1. Pulse test:300us pulse width,1% duty cycle.

### Ratings AND Characteristic Curves

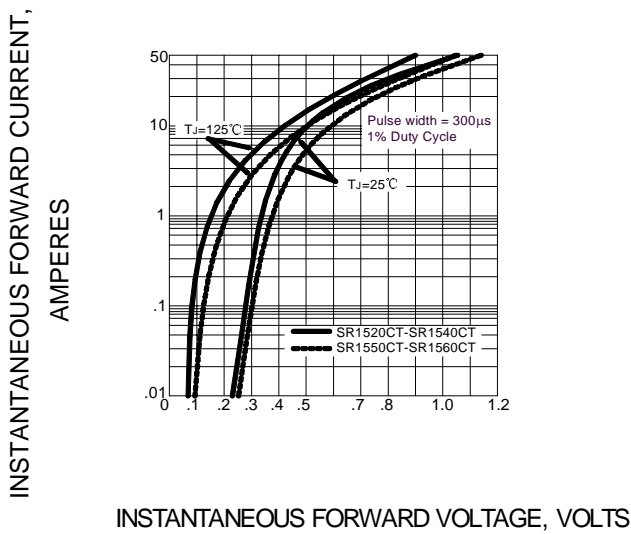
**FIG.1 – FORWARD CURRENT DERATING CURVE**



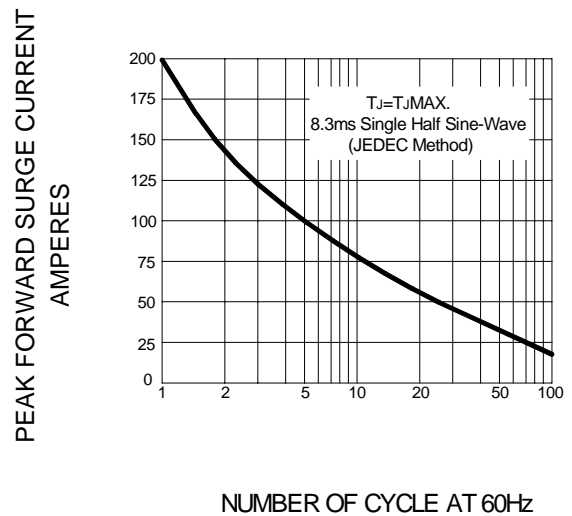
**FIG.2 – TYPICAL REVERSE CHARACTERISTICS PER LEG**



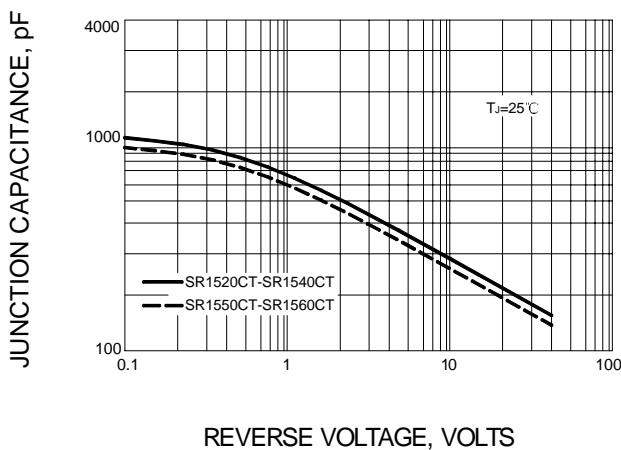
**FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**



**FIG.4 – PEAK FORWARD SURGE CURRENT**



**FIG.5 – TYPICAL JUNCTION CAPACITANCE**



**FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE**

