



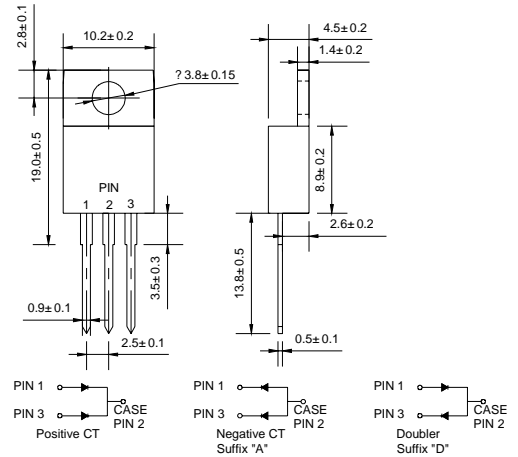
TO-220AB

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: 0.08ounce, 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, 50 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		SR 1020CT	SR 1030CT	SR 1040CT	SR 1050CT	SR 1060CT	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 (See FIG.1)	$I_{F(AV)}$	10.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) @ $T_J=125^\circ\text{C}$	I_{FSM}	175.0					A
Maximum instantaneous forward voltage per leg @ 5A (Note1)	V_F	0.55			0.70		V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	0.5 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

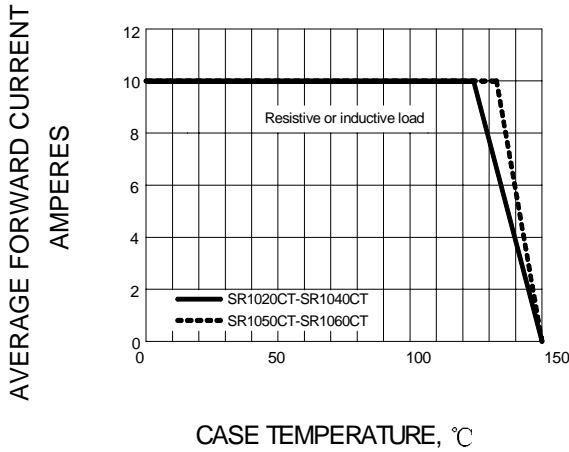


FIG.2 – TYPICAL REVERSE CHARACTERISTICS PER LEG

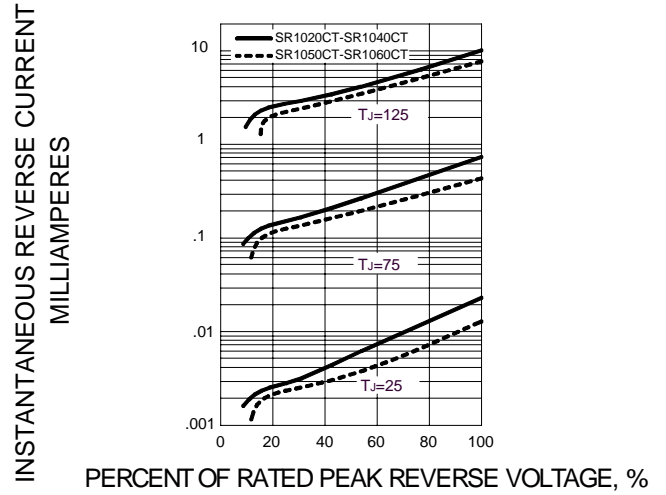


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

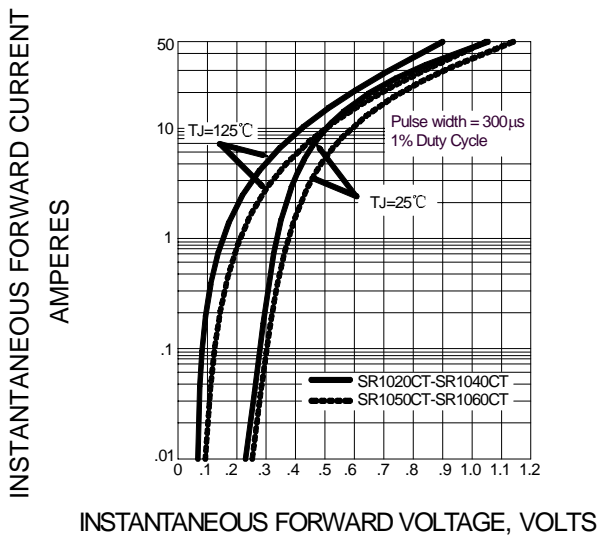


FIG.4 – PEAK FORWARD SURGE CURRENT

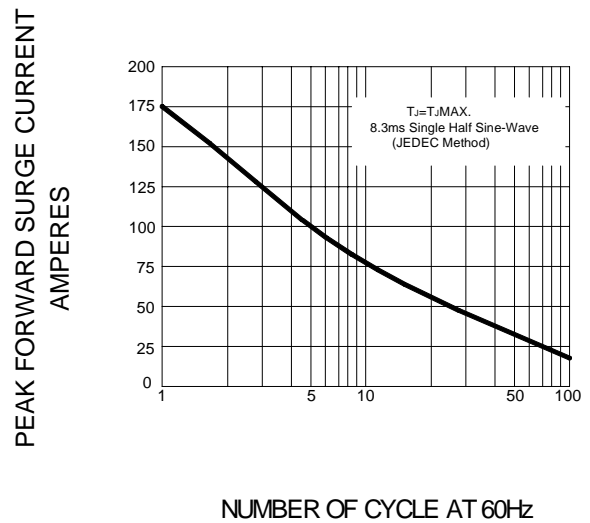


FIG.5 – TYPICAL JUNCTION CAPACITANCE

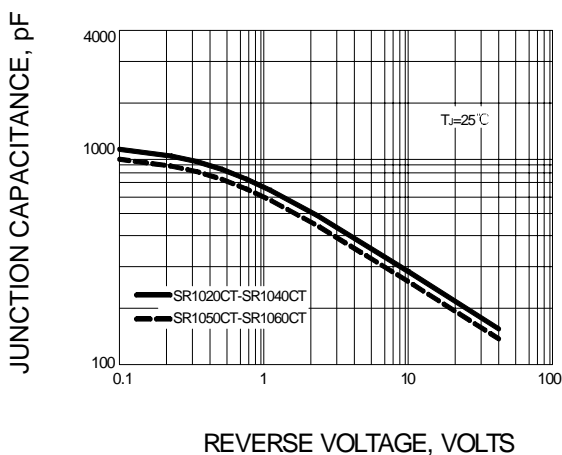


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

