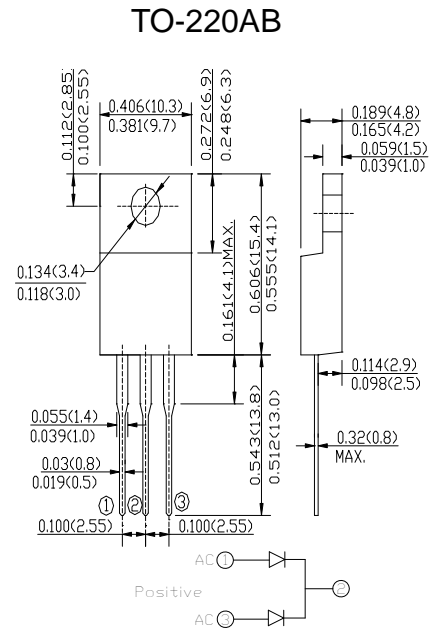


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, Free wheeling and polarity protection applications
- High temperature soldering guaranteed:
250°C/10 seconds at terminals,
- 0.25"(6.35mm)lead length,5lbs.(2.3kg)tension

Mechanical Data

- Case: JEDEC TO-220AB molded plastic body
- Terminals: Lead solder able per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce,2.24 grams



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%.

	Symbols	SR 820CT	SR 840CT	SR 850CT	SR 860CT	SR 8100CT	SR 8150CT	SR 8200CT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	50	60	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	28	35	42	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	40	50	60	100	150	200	Volts
Maximum average forward rectified current (see Fig.1)	$I_{(AV)}$	8.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amp
Maximum instantaneous forward voltage at 4.0 A(Note 1)	V_F	0.60		0.75	0.85	0.90	0.95	Volts	
Maximum Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5							mAmp
		50							
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.5							°C/W
Operating Temperature Range	T_J	-65 to +150							°C
Storage Temperature Range	T_{STG}	-65 to +150							°C

NOTES:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

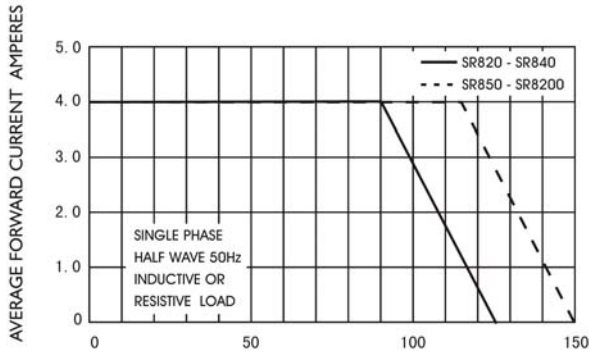


FIG.4-TYPICAL JUNCTION CAPACITANCE

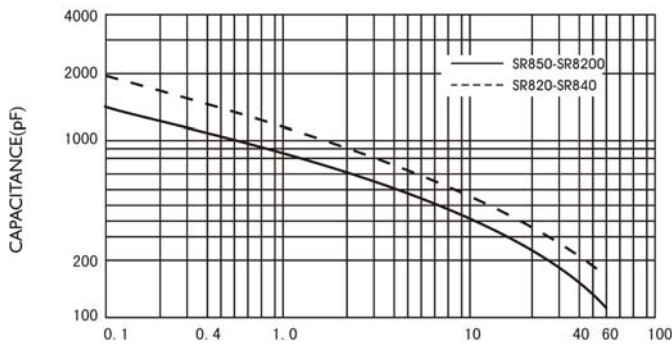


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

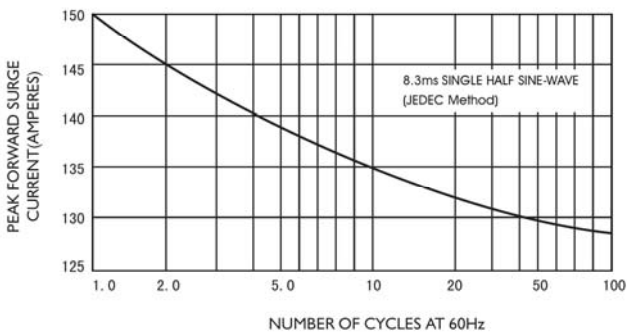


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

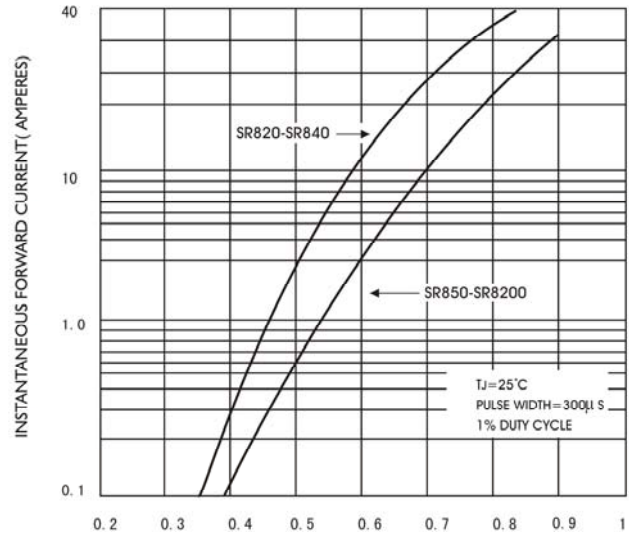


FIG.3-TYPICAL REVERSE CHARACTERISTICS

