

SR3020CT THRU SR30200CT

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 30Amperes

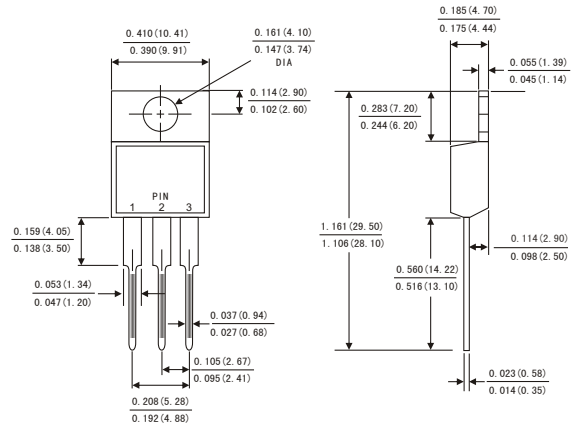


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



TO-220AB



MECHANICAL DATA

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

Dimensions in inches and (millimeters)

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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

		Symbols	SR 3020CT	SR 3030CT	SR 3040CT	SR 3045CT	SR 3060CT	SR 3080CT	SR 30100CT	SR 30150CT	SR 30200CT	Units
Maximum repetitive peak reverse voltage		VRRM	20	30	40	45	60	80	100	150	200	Volts
Maximum RMS voltage		VRMS	14	21	28	32	42	56	70	105	140	Volts
Maximum DC blocking voltage		VDC	20	30	40	45	60	80	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg Total device	IAV	15.0 30.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	250.0									Amps
Maximum instantaneous forward voltage at 30.0 A		VF	0.60				0.75	0.85		0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	Tc = 25°C Tc = 125°C	IR	0.2 30 50									mA
Typical thermal resistance (Note 2)		RθJC	3.0									°C/W
Operating junction temperature range		TJ	-65 to +150									°C
Storage temperature range		TSTG	-65 to +150									°C

Notes: 1.Pulse test: 300 μ s pulse width,1% duty cycle

2.Thermal resistance from junction to case

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FIG.1-FORWARD CURRENT DERATING CURVE

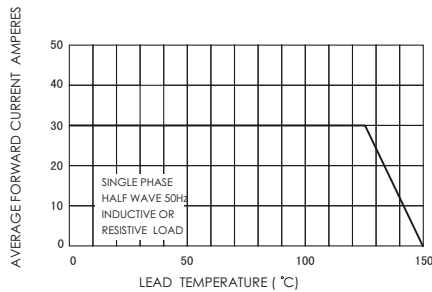


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

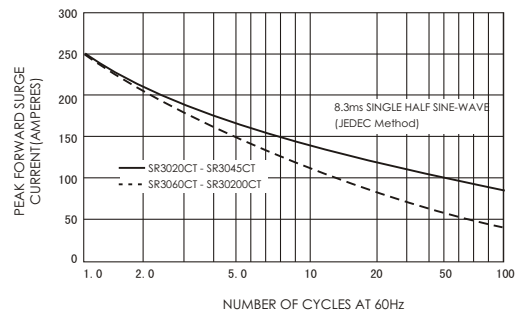


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

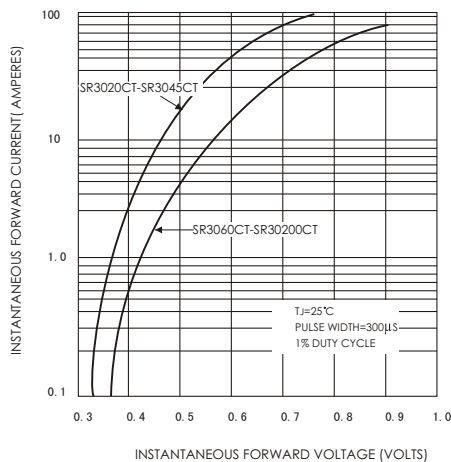


FIG.4-TYPICAL REVERSE CHARACTERISTICS

