

SR1020CT THRU SR10200CT

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts

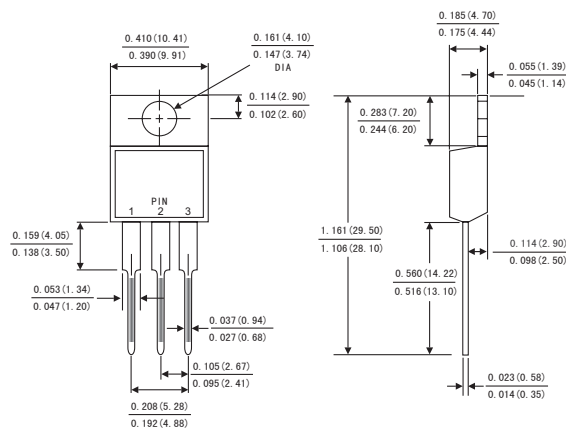
Forward Current - 10.0Amperes

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
- For use in low voltage ,high frequency inverters,
- free wheeling ,and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed:260 °C/10 seconds,,
- 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



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

Dimensions in inches and (millimeters)

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 1020CT	SR 1030CT	SR 1045CT	SR 1060CT	SR 10100CT	SR 10150CT	SR 10200CT	Units
Maximum repetitive peak reverse voltage	VRRM	20	30	45	60	100	150	200	Volts
Maximum RMS voltage	VRMS	14	21	32	42	70	105	140	Volts
Maximum DC blocking voltage	VDC	20	30	45	60	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg Total device	I(AV)	5.0 10.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150.0							Amps
Maximum instantaneous forward voltage at 5.0 A per leg(Notes 1)	VF	0. 60			0.75	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Notes 1)	Ts=25°C	IR	200			50			μ A
	Ts=100°C		5			-			mA
	Ts=125°C		-			5			
Typical thermal resistance (Notes 2)	RθJC	2.5							°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

RATINGS AND CHARACTERISTIC CURVES SR1020CT THRU SR10200CT

FIG.1-FORWARD CURRENT DERATING CURVE

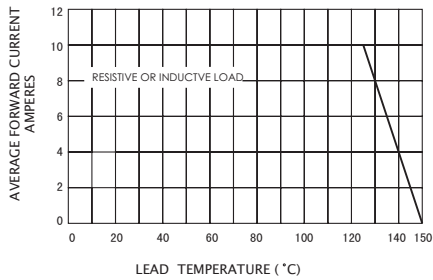


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

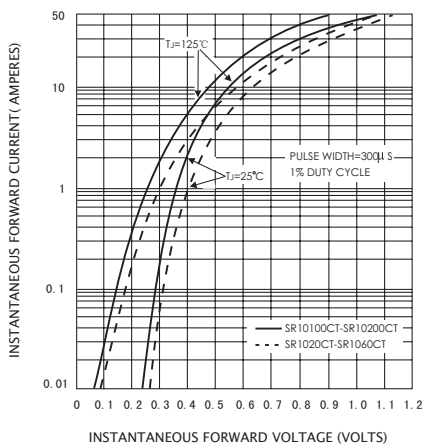


FIG.5-TYPICAL JUNCTION CAPACITANCE

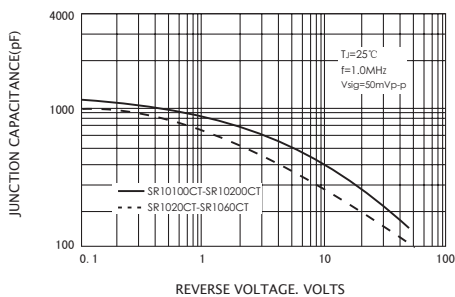


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

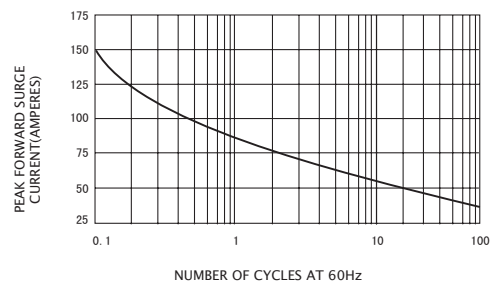


FIG.4-TYPICAL REVERSE CHARACTERISTICS

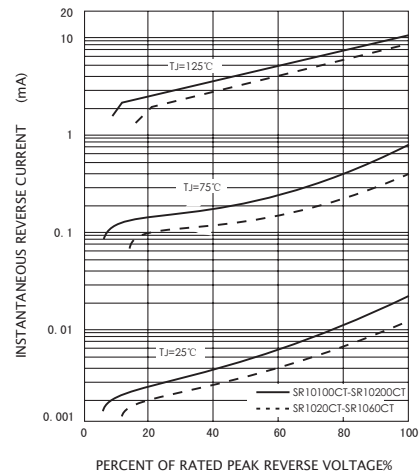


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

