



S E M I C O N D U C T O R

SR2020CT THRU SR20200CT

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts

Forward Current - 20Amperes

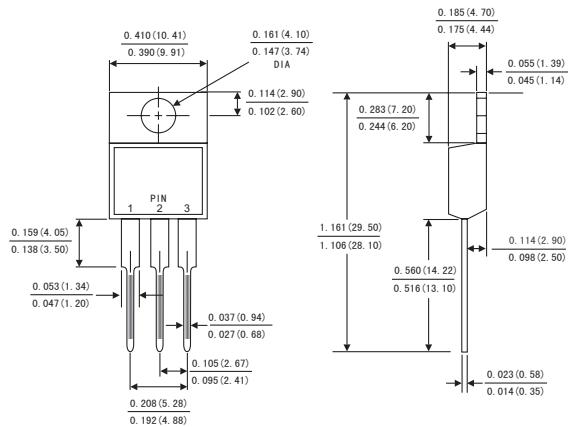
FEATURES

- 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
- High surge capability
- 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



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 2020CT	SR 2030CT	SR 2045CT	SR 2060CT	SR 20100CT	SR 20150CT	SR 20200CT	Units			
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	45	60	100	150	200	Volts			
Maximum RMS voltage	V _{RMS}	14	21	32	42	70	105	140	Volts			
Maximum DC blocking voltage	V _{DC}	20	30	45	60	100	150	200	Volts			
Maximum average forward rectified current See Fig. 1	I _(AV)	10.0 20.0							Amps			
Total device												
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	200.0							Amps			
Maximum instantaneous forward voltage per diode @I=10A	V _F	0. 60		0.75	0.85	0.90	0.95		Volts			
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _C =25°C	200			50				µA			
	T _C =100°C	5			-				mA			
	T _C =125°C	-			5							
Typical thermal resistance (Note 2)	R _{θJC}	2.5							°C/W			
Operating junction temperature range	T _J	-65 to+150							°C			
Storage temperature range	T _{STG}	-65 to+150							°C			

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

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR2020CT THRU SR20200CT

FIG.1-FORWARD CURRENT DERATING CURVE

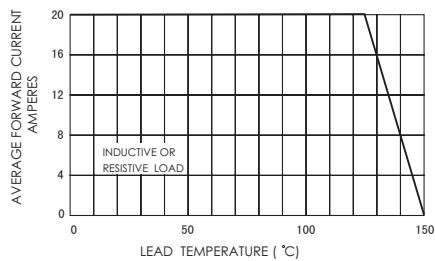


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

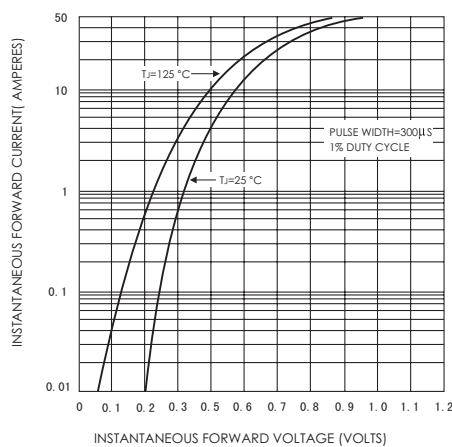


FIG.5-TYPICAL JUNCTION CAPACITANCE

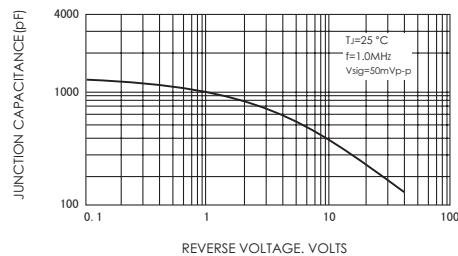


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

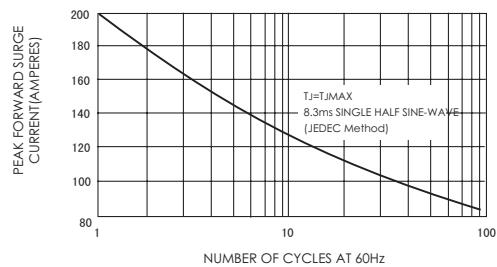


FIG.4-TYPICAL REVERSE CHARACTERISTICS

