

# SRF1020CT THRU SRF10200CT

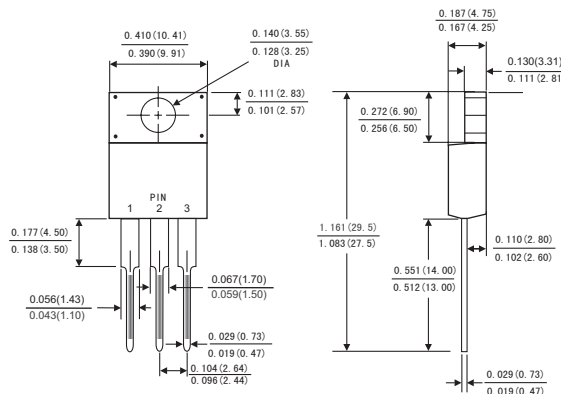
SCHOTTKY BARRIER RECTIFIER  
Reverse Voltage - 20 to 200 Volts  
Forward Current - 10.0Amperes

## 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
- 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



## ITO-220AB



## MECHANICAL DATA

- Case: JEDEC ITO-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	SRF 1020CT	SRF 1030CT	SRF 1040CT	SRF 1060CT	SRF 10100CT	SRF 10150CT	SRF 10200CT	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	60	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	42	70	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	5.0							Amps
	Total device	10.0							
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150.0							Amps
Maximum instantaneous forward voltage at 5.0 A per leg(Notes 1 )	V <sub>F</sub>	0.60		0.75	0.85	0.90	0.95	Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Notes 1)	T <sub>A</sub> =25°C	200			50				μA
	T <sub>A</sub> =100°C	5			-				mA
	T <sub>A</sub> =125°C	-			5				
Typical thermal resistance (Notes 2)	R <sub>θJC</sub>	2.5							°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to+150							°C
Storage temperature range	T <sub>STG</sub>	-55 to+150							°C

- Notes: 1.Pulse test: 300μs pulse width,1% duty cycle  
2.Thermal resistance from junction to case

# RATINGS AND CHARACTERISTIC CURVES SRF1020CT THRU SRF10200CT

FIG.1-FORWARD CURRENT DERATING CURVE

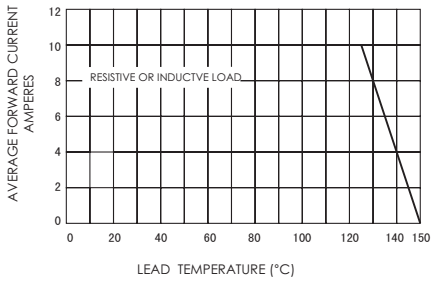


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

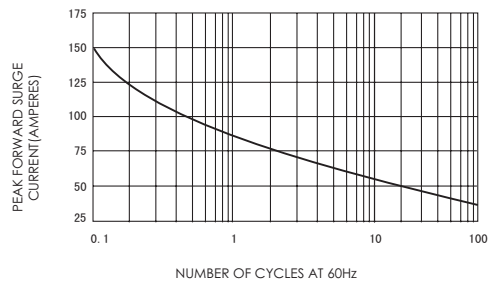


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

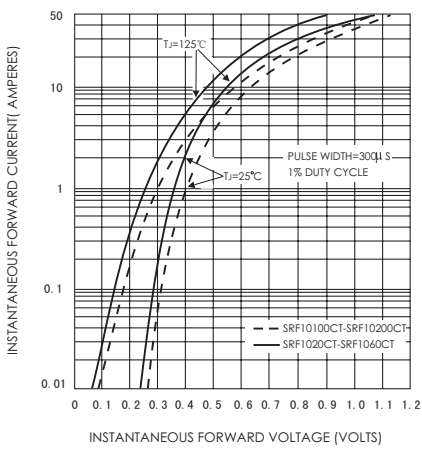


FIG.4-TYPICAL REVERSE CHARACTERISTICS

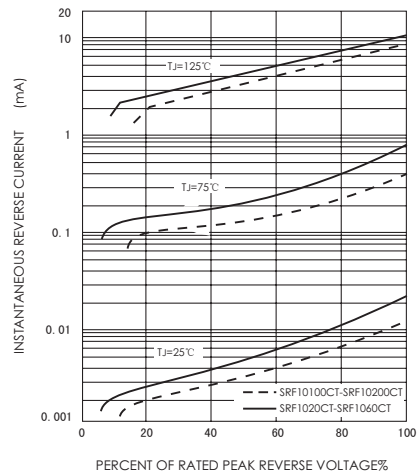


FIG.5-TYPICAL JUNCTION CAPACITANCE

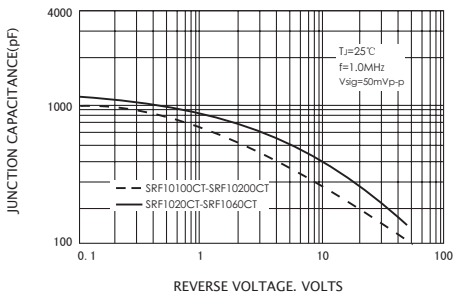


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

