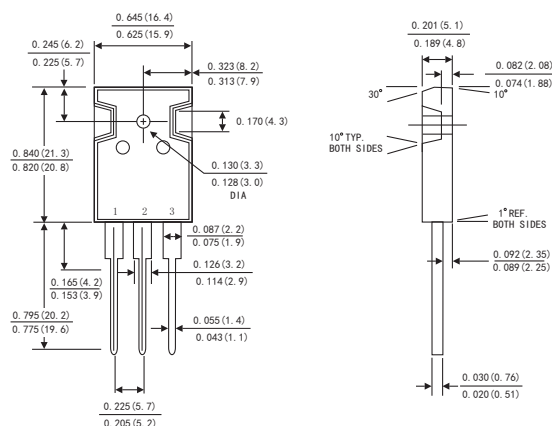


## FEATURES

- 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

## TO-247



Dimensions in inches and (millimeters)

## MECHANICAL DATA

- Case: TO-247 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked.
- Mounting Position: Any

## 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 90200CT				Units
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	200				Volts
Maximum RMS voltage		V <sub>RMS</sub>	140				Volts
Maximum DC blocking voltage		V <sub>DC</sub>	200				Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I <sub>(AV)</sub>	45.0				Amps
	Total device		90.0				
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	460.0				Amps
Forward voltage at 45.0 A, per leg(Notes 1)		V <sub>F</sub>	TYP.	0.94	MAX.	0.96	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Notes 1)	T <sub>A</sub> =25°C	I <sub>R</sub>	TYP.	-	MAX.	100	μA
	T <sub>A</sub> =125°C		TYP.	-	MAX.	3.5	mA
Typical thermal resistance (Notes 2)		R <sub>θJC</sub>	0.23				°C/W
Operating junction temperature range		T <sub>J</sub>	-55 to+175				°C
Storage temperature range		T <sub>STG</sub>	-55 to+175				°C

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

# RATINGS AND CHARACTERISTIC CURVES SR90200PT

FIG.1-FORWARD CURRENT DERATING CURVE

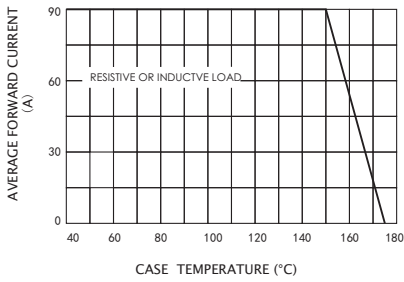


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

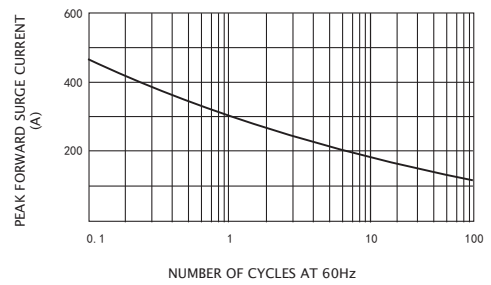


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

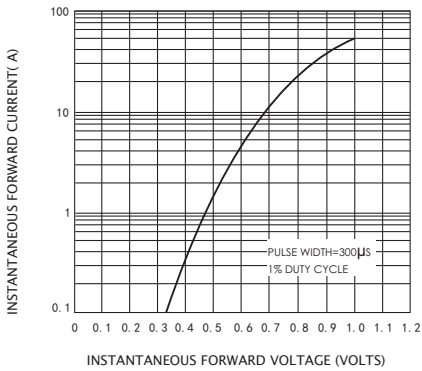


FIG.4-TYPICAL REVERSE CHARACTERISTICS

