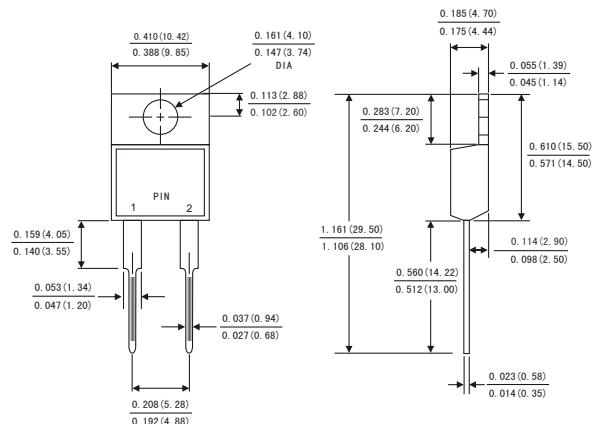


## FEATURES

- 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-220AC



Dimensions in inches and (millimeters)

## MECHANICAL DATA

- Case: JEDEC TO-220AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Weight: 0.08ounce, 2.24 gram

## 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 1020	SR 1030	SR 1040	SR 1050	SR 1060	SR 1080	SR 10100	SR 10150	SR 10200	Units								
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts								
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	Volts								
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	Volts								
Maximum average forward rectified current (see Fig.1)	I <sub>(AV)</sub>	10.0									Amps								
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 10.0 A(Note 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(Note 1)	T <sub>A</sub> =25°C T <sub>A</sub> =125°C	IR	0.2								mA								
Typical thermal resistance (Note 2)			15		50														
Operating junction temperature range	T <sub>J</sub>	-65 to +150										°C							
Storage temperature range	T <sub>STG</sub>	-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 SR1020 THRU SR10200 (SINGLE CHIP)

FIG.1-FORWARD CURRENT DERATING CURVE

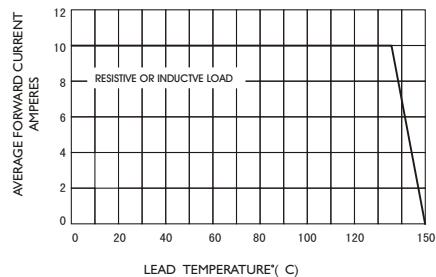


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

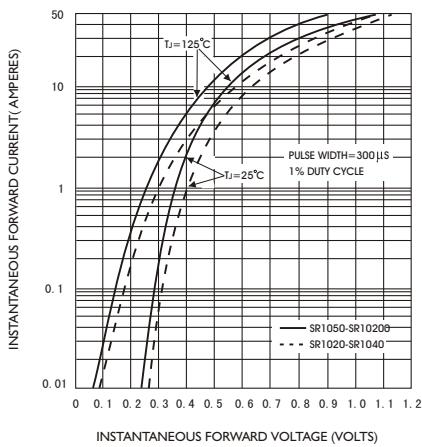


FIG.5-TYPICAL JUNCTION CAPACITANCE

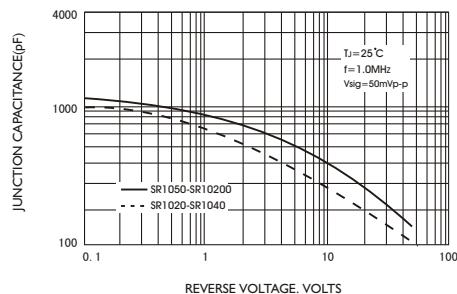


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

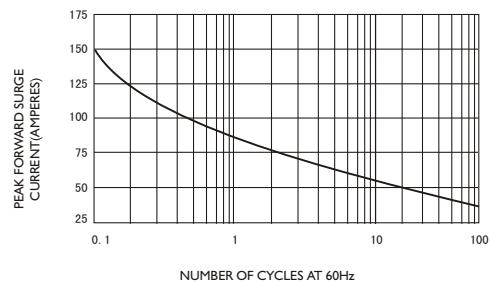


FIG.4-TYPICAL REVERSE CHARACTERISTICS

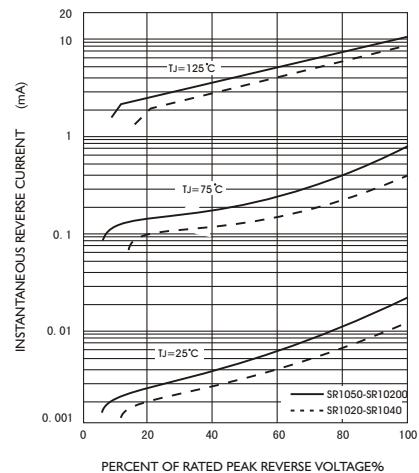


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

