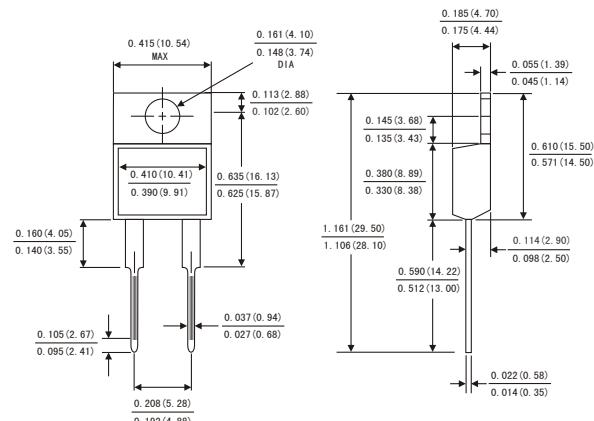


## FEATURES

- 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 620	SR 630	SR 640	SR 650	SR 660	SR 680	SR 6A0	SR 6150	SR 6200	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	57	71	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 0.375"(9.5mm) lead length(see fig.1)	I <sub>(AV)</sub>	6.0								Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T <sub>J</sub> )	I <sub>FSM</sub>	150.0								Amps	
Maximum instantaneous forward voltage at 6.0 A(atone 1 )	V <sub>F</sub>	0.60		0.75		0.85		0.90		0.95	
Maximum instantaneous reverse current at rated DC blocking voltage T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	I <sub>R</sub>	0.5								mA	
Typical junction capacitance(Note 3)	C <sub>J</sub>	500		400						pF	
Typical thermal resistance (Note 2)	R <sub>θJA</sub> R <sub>θJL</sub>	25.0 8.0								°C/W	
Operating junction temperature range	T <sub>J</sub>	-65 to +125		-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 lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

3.Measured at 1MHz and reverse voltage of 4.0volts

# RATINGS AND CHARACTERISTIC CURVES SR620 THRU SR6200(SINGLE CHIP)

FIG.1-FORWARD CURRENT DERATING CURVE

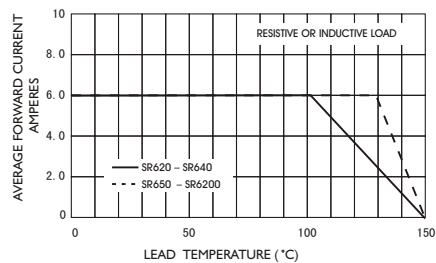


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

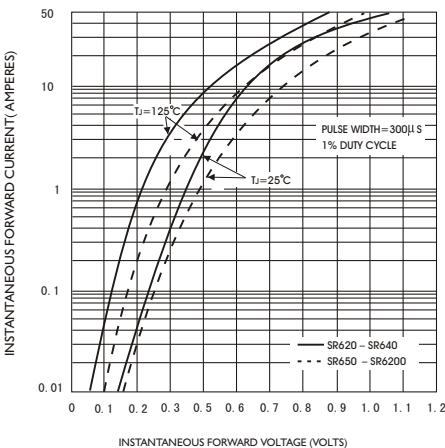


FIG.5-TYPICAL JUNCTION CAPACITANCE

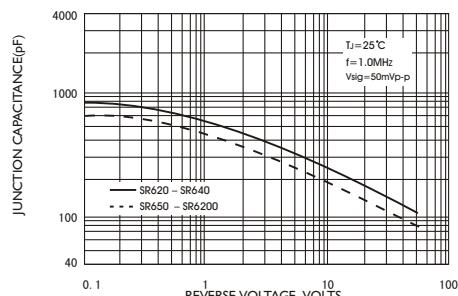


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

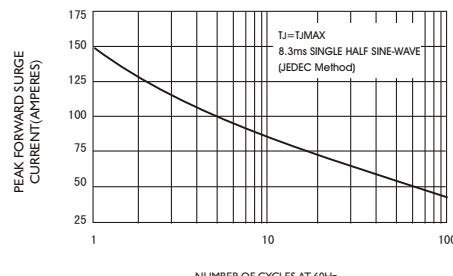


FIG.4-TYPICAL REVERSE CHARACTERISTICS

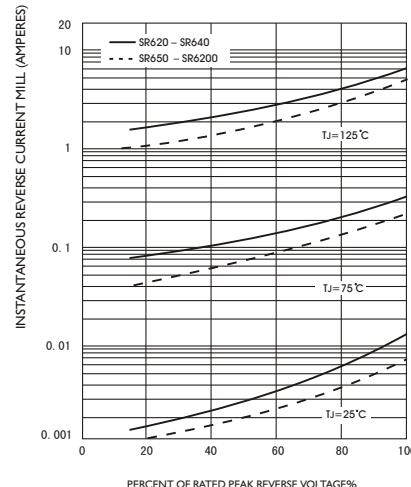


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

