SEMICONDUCTOR

SR3020 THRU SR30200

SCHOTTKY BARRIER RECTIFIER

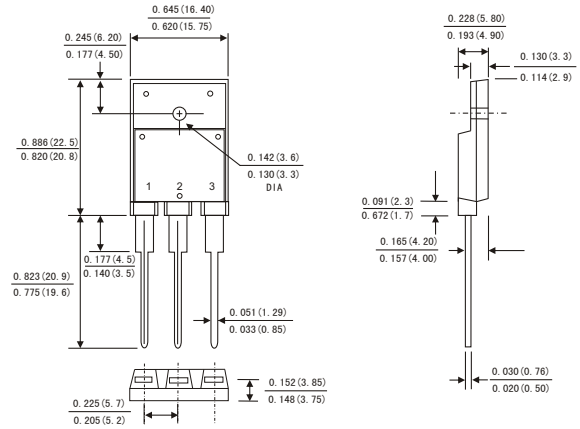
Reverse Voltage - 20 to 200 Volts
Forward Current - 30Amperes

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℃/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



TO-3P



Dimensions in inches and (millimeters)

MECHANICAL DATA

- *Case*: JEDEC TO-3P molded plastic body
- *Terminals*: Lead solderable per MIL-STD-750,method 2026
- *Polarity*: As marked
- *Mounting Position*: Any
- *Weight*: 0.20ounce, 5.6 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SR 3020	SR 3030	SR 3040	SR 3045	SR 3060	SR 3080	SR 30A0	SR 30150	SR 30200	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	32	42	56	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	45	60	80	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	$I_{(AV)}$	30.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250.0									Amps
Maximum instantaneous forward voltage at 30.0 A	V_F	0.60				0.75	0.85		0. 95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) T_c=25℃	I_R	0. 5									mA
T_c=125℃		30				50					
Typical thermal resistance (Note 2)	$R_{\theta JC}$	1. 4									℃/W
Operating junction temperature range	T_J	-65 to+125				-65 to+150					℃
Storage temperature range	T_{STG}	-65 to+150									℃

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

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RATINGS AND CHARACTERISTIC CURVES SR3020-SR30200

FIG.1-FORWARD CURRENT DERATING CURVE

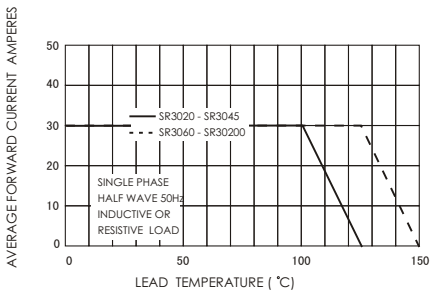


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

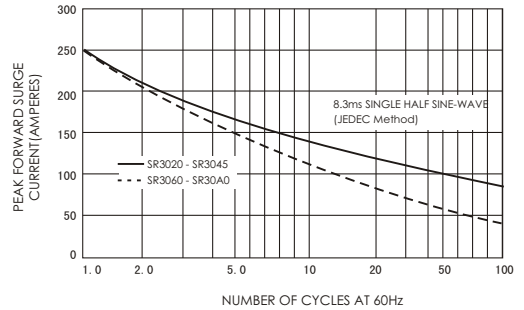


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

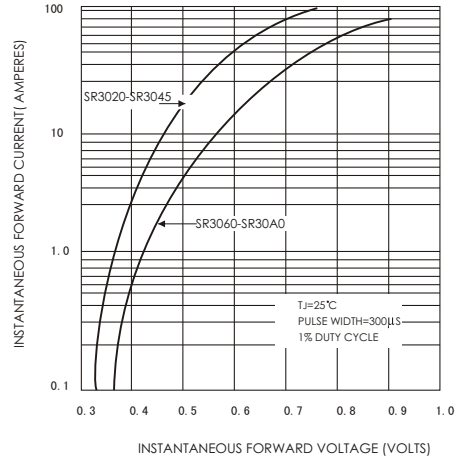
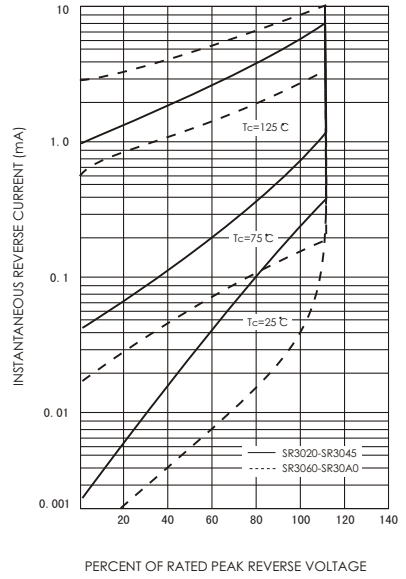


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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