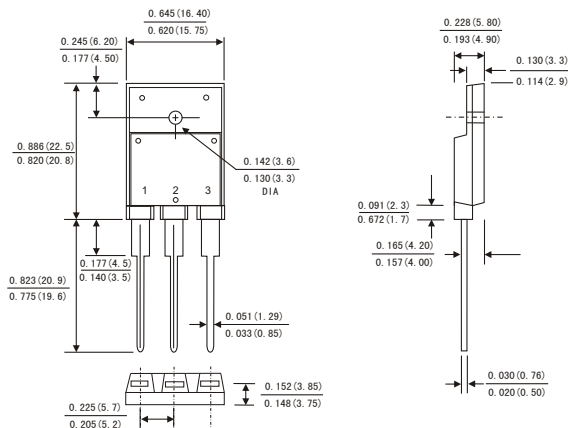


FEATURES

- 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-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°C 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	VRRM	20	30	40	45	60	80	100	150	200	Volts
Maximum RMS voltage	VRMS	14	21	28	32	42	56	70	105	140	Volts
Maximum DC blocking voltage	VDC	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)	IFSM	250.0									Amps
Maximum instantaneous forward voltage at 30.0 A	VF	0.60				0.75	0.85		0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TC = 25°C TC = 125°C	IR	0.5						mA		
			30			50					
Typical thermal resistance (Note 2)	ROJC	1.4									°C/W
Operating junction temperature range	TJ	-65 to +125				-65 to +150					°C
Storage temperature range	TSTG	-65 to +150									°C

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR3020-SR30200

FIG.1-FORWARD CURRENT DERATING CURVE

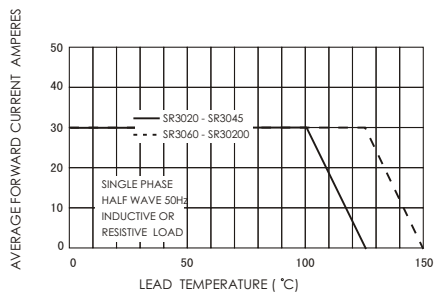


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

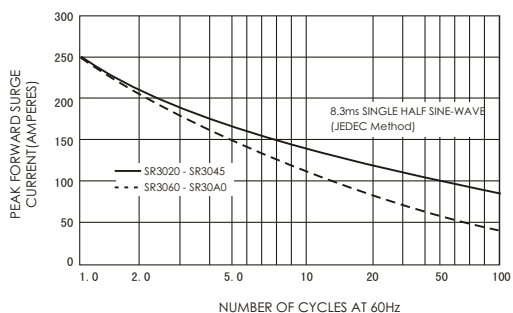


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

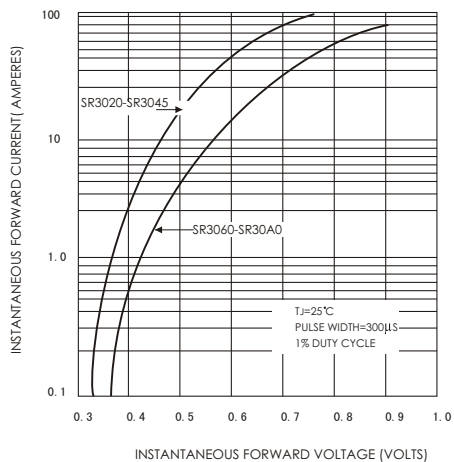


FIG.4-TYPICAL REVERSE CHARACTERISTICS

