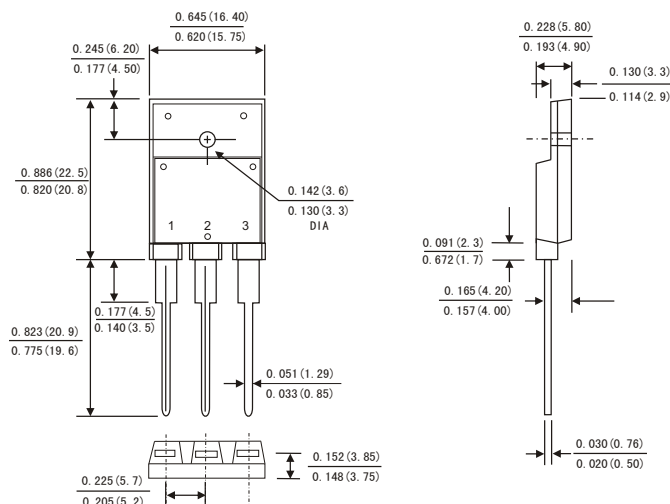


FEATURES

- 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	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°C	0.5									mA	
	T _c = 125°C	30			50							
Typical thermal resistance (Note 2)	R _{θJC}	1.4									°C/W	
Operating junction temperature range	T _J	-65 to+125				-65 to+150						°C
Storage temperature range	T _{STG}	-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

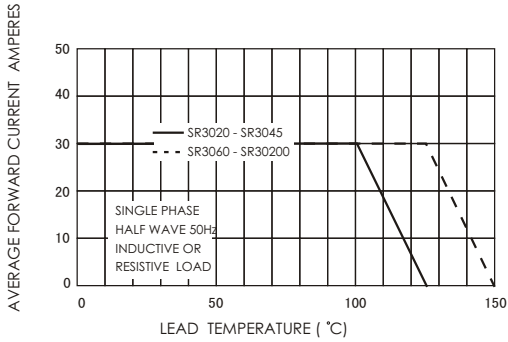


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

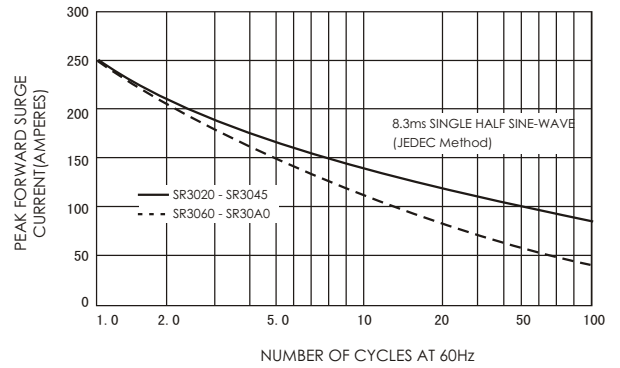


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

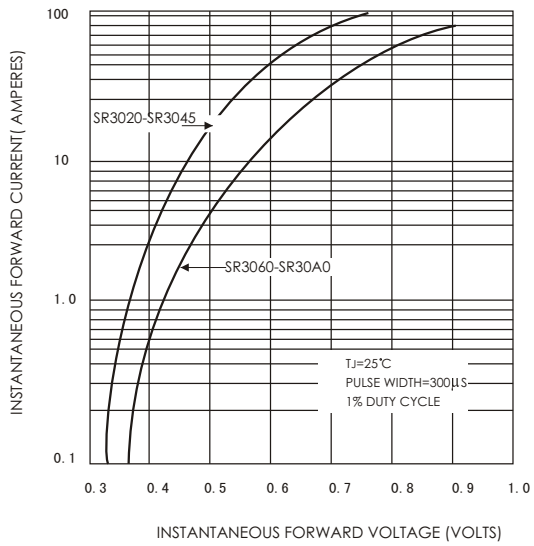


FIG.4-TYPICAL REVERSE CHARACTERISTICS

