

# SR3020 THRU SR3060



30.0 AMP SCHOTTKY BARRIER RECTIFIERS



## FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

## MECHANICAL DATA

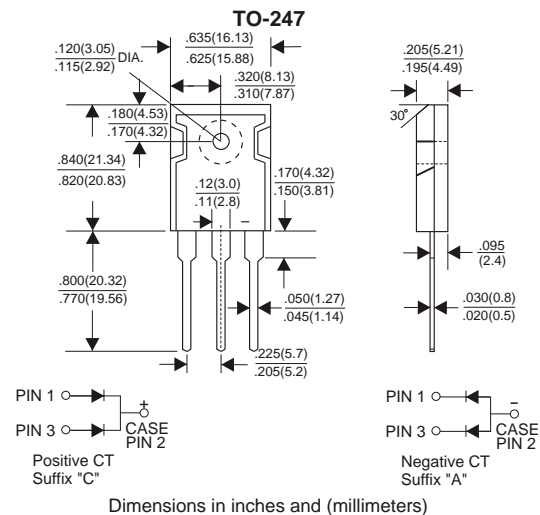
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 5.60 grams

## VOLTAGE RANGE

20 to 60 Volts

## CURRENT

30.0 Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	SR3020	SR3030	SR3035	SR3040	SR3045	SR3050	SR3060	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	35	40	45	50	60	V
Maximum RMS Voltage	14	21	24	28	31	35	42	V
Maximum DC Blocking Voltage	20	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current								
See Fig. 1	30							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	300							A
Maximum Instantaneous Forward Voltage per Leg at 15.0A	0.65					0.75		V
Maximum DC Reverse Current	10							mA
at Rated DC Blocking Voltage	100							mA
Typical Thermal Resistance R <sub>qJC</sub> (Note 1)	1.4							°C/W
Operating Temperature Range T <sub>J</sub>	-65 — +125					-65 — +150		°C
Storage Temperature Range T <sub>stg</sub>	-65 — +150							°C

### NOTES:

1. Thermal Resistance Junction to Case.

## RATING AND CHARACTERISTIC CURVES (SR3020 THRU SR3060)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

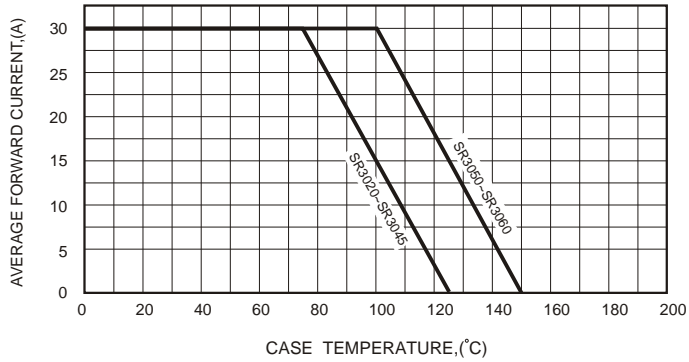


FIG.2-TYPICAL FORWARD CHARACTERISTICS

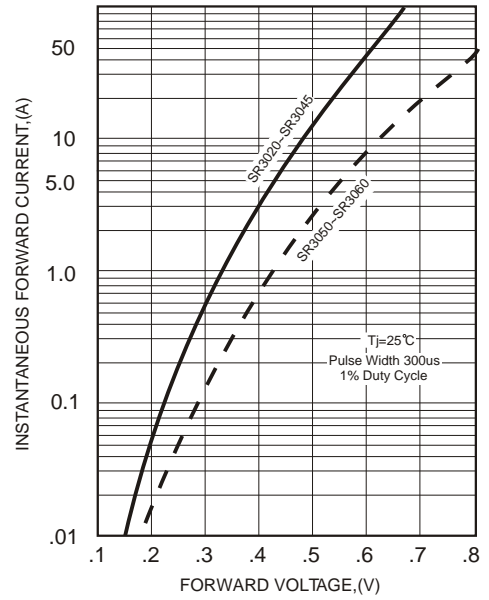


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

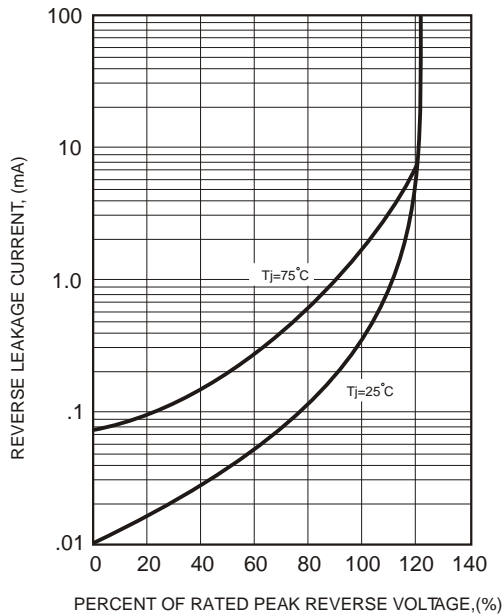


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

