

# SR1020 THRU SR1060



10.0 AMP SCHOTTKY BARRIER RECTIFIERS



## FEATURES

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

## MECHANICAL DATA

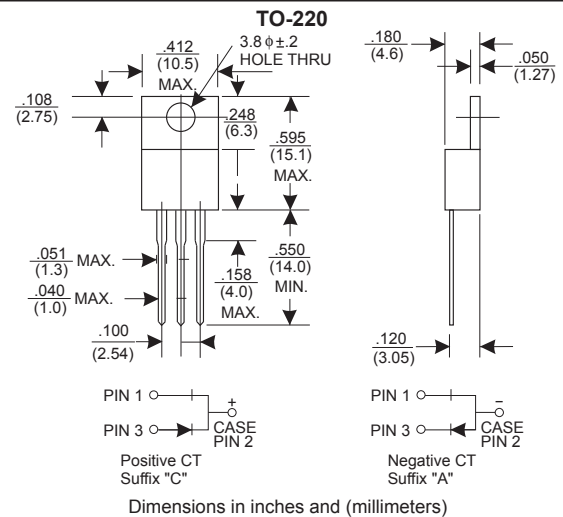
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 2.24 grams

## VOLTAGE RANGE

20 to 60 Volts

## CURRENT

10.0 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	SR1020	SR1030	SR1035	SR1040	SR1045	SR1050	SR1060	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								10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								150	A
Maximum Instantaneous Forward Voltage at 5.0A			0.65				0.75	V	
Maximum DC Reverse Current				10				mA	
at Rated DC Blocking Voltage				100				mA	
Typical Junction Capacitance (Note1)				700				pF	
Typical Thermal Resistance RθJC (Note 2)				3.0				°C/W	
Operating Temperature Range T <sub>J</sub>				-65 — +125				°C	
Storage Temperature Range T <sub>STG</sub>				-65 — +150				°C	

### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

## RATING AND CHARACTERISTIC CURVES (SR1020 THRU SR1060)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

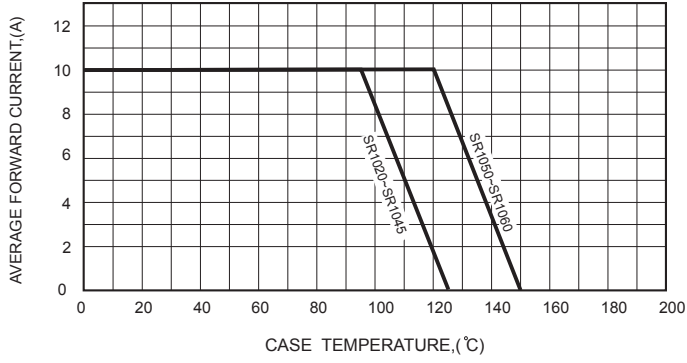


FIG.2-TYPICAL FORWARD CHARACTERISTICS

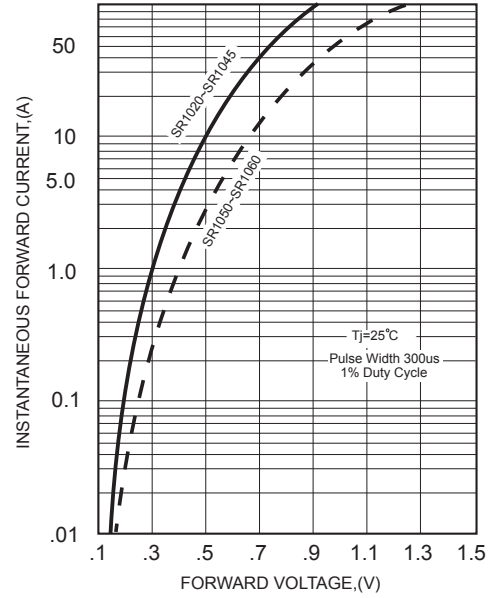


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

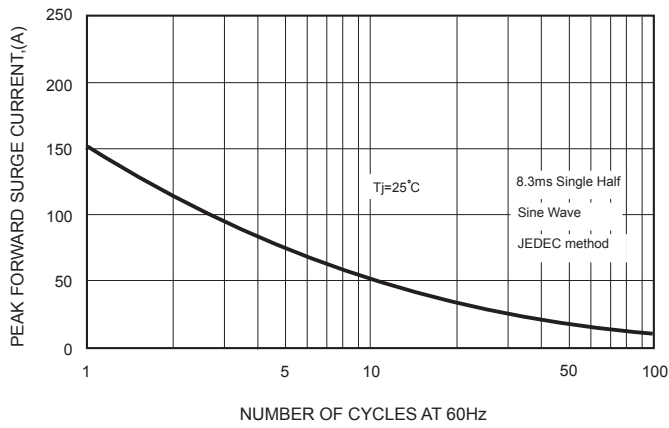


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

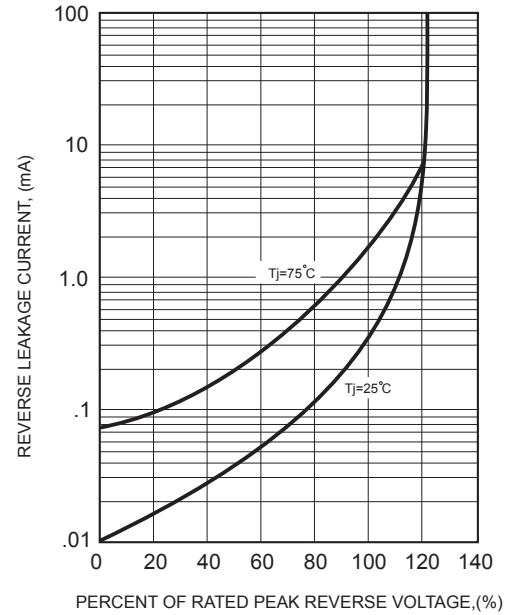


FIG.4-TYPICAL JUNCTION CAPACITANCE

