

# SR1020 THRU SR10100



10.0AMP SCHOTTKY BARRIER RECTIFIERS



## FEATURES

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

## MECHANICAL DATA

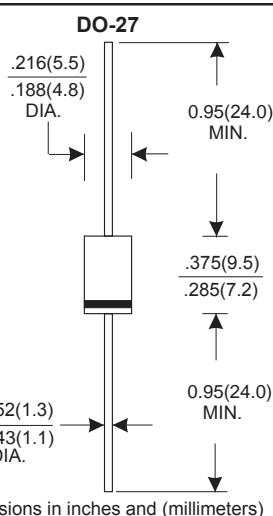
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.04 grams
- \* Lead Free Finish/RoHS Compliant

## VOLTAGE RANGE

20 to 100 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	SR1040	SR1045	SR1050	SR1060	SR1080	SR10100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	45	50	60	80	100	V
Maximum RMS Voltage	14	21	28	32	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	10.0								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 10.0A	0.55		0.70		0.85				
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25°C				500		uA		
	Ta=100°C				100		mA		
Typical Junction Capacitance (Note1)	250								pF
Typical Thermal Resistance RθJA (Note 2)	20								°C/W
Operating Temperature Range Tj	-65 — +150								°C
Storage Temperature Range Tstg	-65 — +150								°C

### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5" (12.7mm) Lead Length.

## RATING AND CHARACTERISTIC CURVES (SR1020 THRU SR10100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

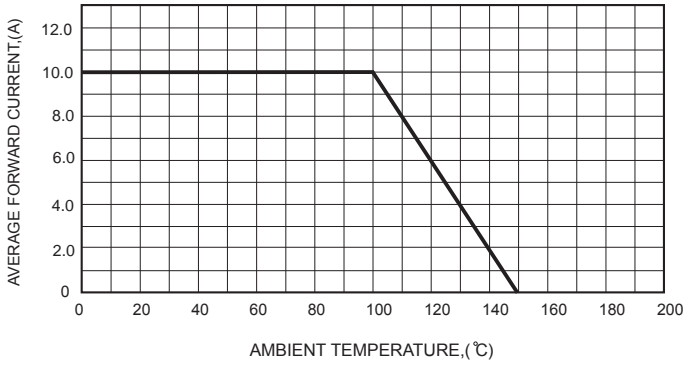


FIG.2-TYPICAL FORWARD CHARACTERISTICS

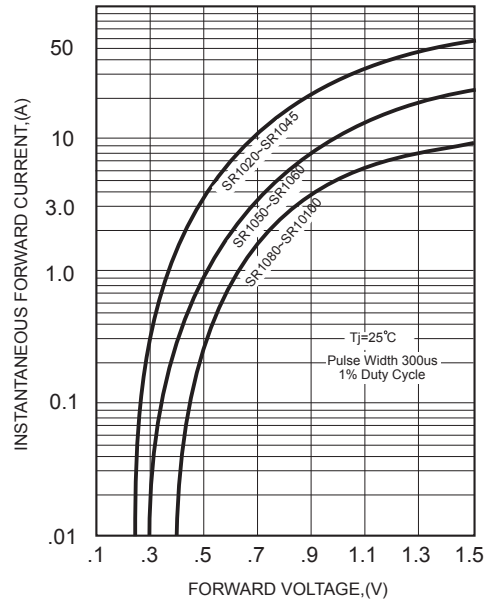


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

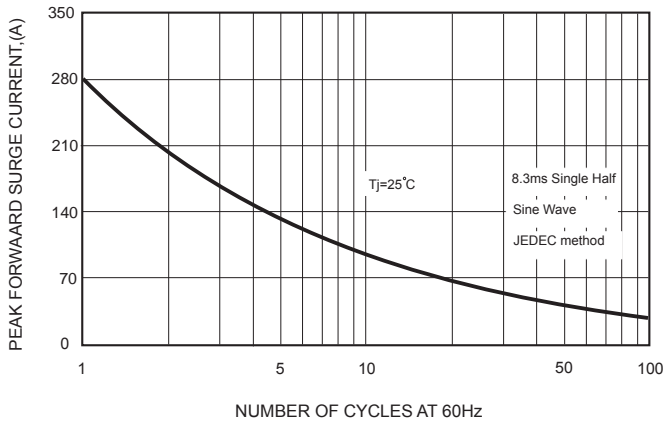


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

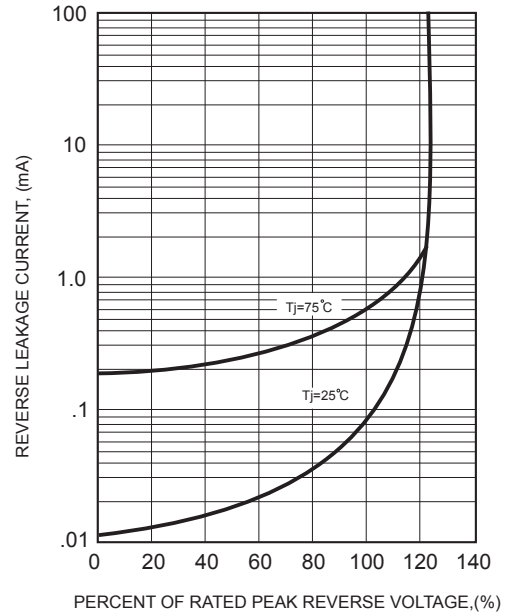


FIG.4-TYPICAL JUNCTION CAPACITANCE

