

# SR1620 THRU SR1660

# FMS

## 16.0 AMP SCHOTTKY BARRIER RECTIFIERS



### FEATURES

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

### MECHANICAL DATA

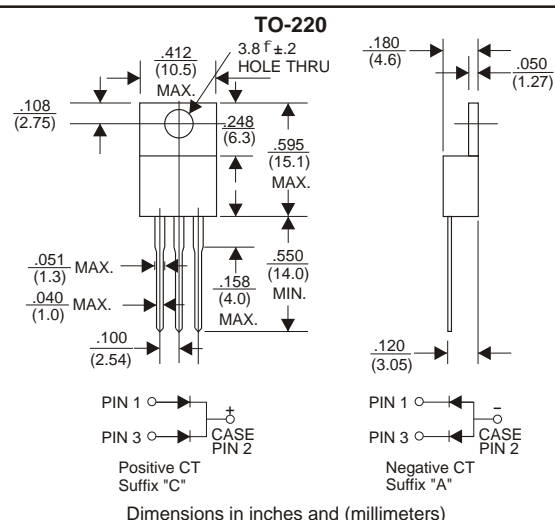
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 2.24 grams

### VOLTAGE RANGE

20 to 60 Volts

### CURRENT

16.0 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	SR1620	SR1630	SR1635	SR1640	SR1645	SR1650	SR1660	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								16	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								150	A
Maximum Instantaneous Forward Voltage per Leg at 8.0A						0.65	0.75	V	
Maximum DC Reverse Current Ta=25°C								10	mA
at Rated DC Blocking Voltage Ta=100°C								100	mA
Typical Junction Capacitance (Note1)						700	460	pF	
Typical Thermal Resistance RqJC (Note 2)								3.0	°C/W
Operating Temperature Range Tj						-65 — +125	-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 Case.

## RATING AND CHARACTERISTIC CURVES (SR1620 THRU SR1660)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

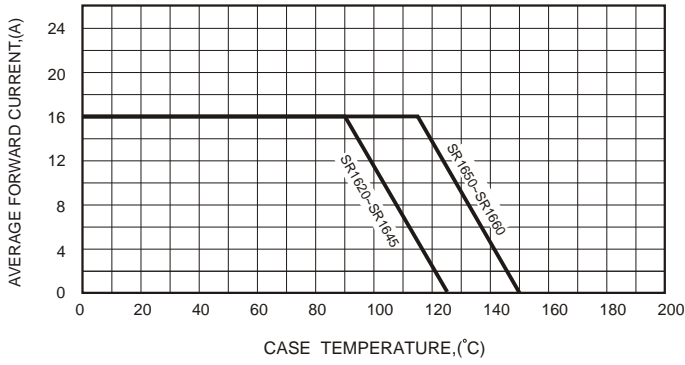


FIG.2-TYPICAL FORWARD CHARACTERISTICS

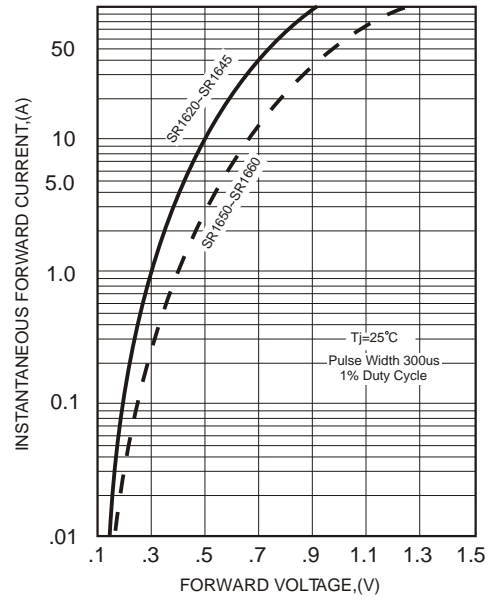


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

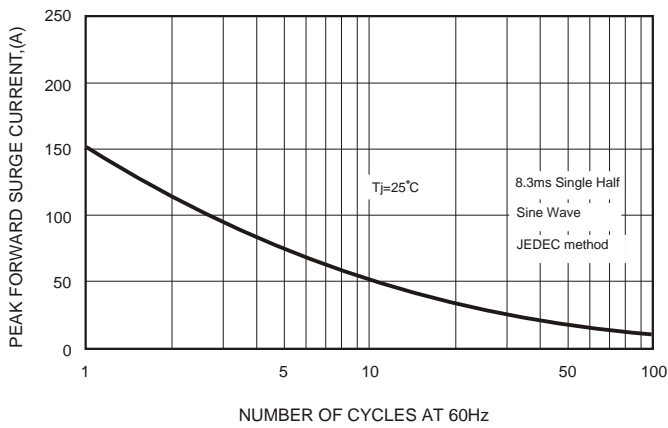


FIG.4-TYPICAL JUNCTION CAPACITANCE

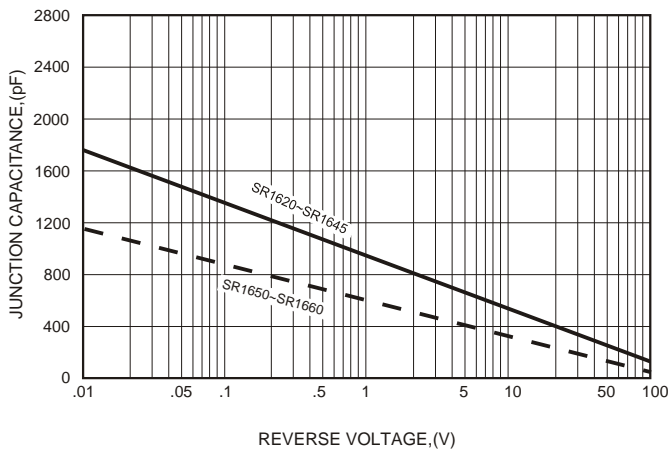


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

