



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**SR1620  
THRU  
SR16200**

**TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE - 20 to 200 Volts**

**CURRENT - 16 Amperes**

**FEATURES**

- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

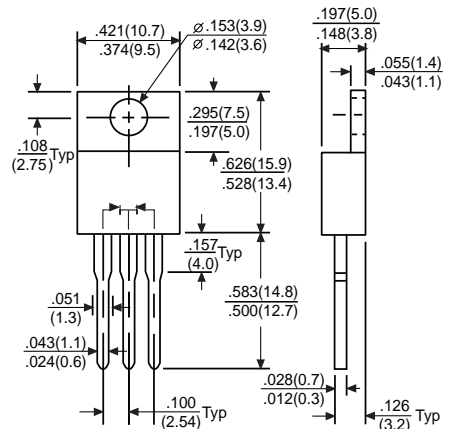
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Mounting position: Any
- \* Weight: 2.24 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



TO-220



Dimensions in inches and (millimeters)

	SYMBOL	SR1620	SR1630	SR1640	SR1650	SR1660	SR1680	SR16100	SR16150	SR16200	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I <sub>o</sub>	16									Amps
Peak Forward Surge Current I <sub>FSM</sub> (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150									Amps
Maximum Forward Voltage at 8.0A DC	V <sub>F</sub>	0.65		0.75		0.85		0.95		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	@T <sub>c</sub> = 25°C									mAmps
		@T <sub>c</sub> = 100°C									
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	2.5									°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	700									pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150									°C

- Note : 1. Thermal Resistance Junction to Case per leg.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. Suffix "A"= Common Anode  
4. Suffix "F" Stands for "ITO-220" package. (e.g.: SR1620E, SR1630F, .....etc)

# RATING AND CHARACTERISTIC CURVES (SR1620 THRU SR16200)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

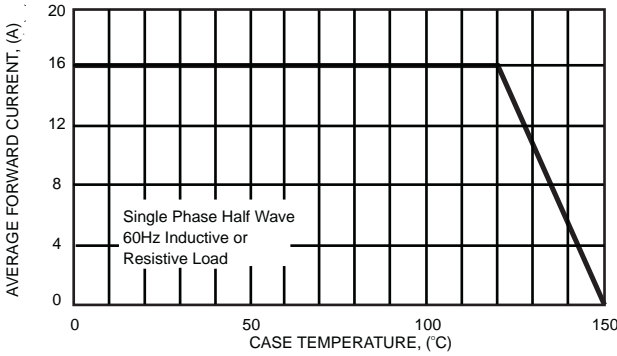


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

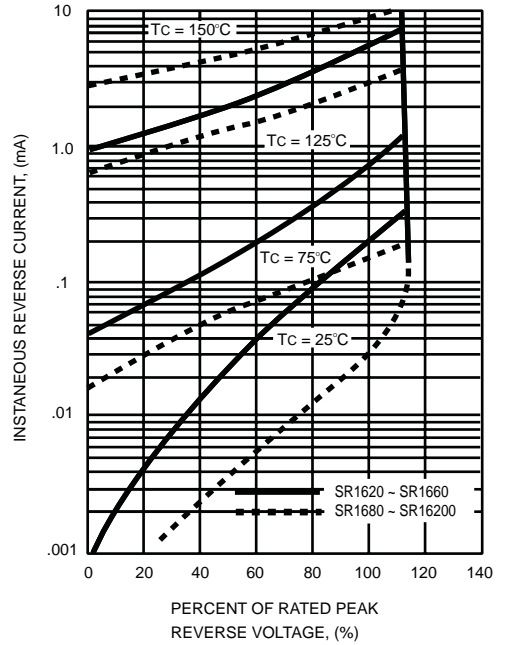


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

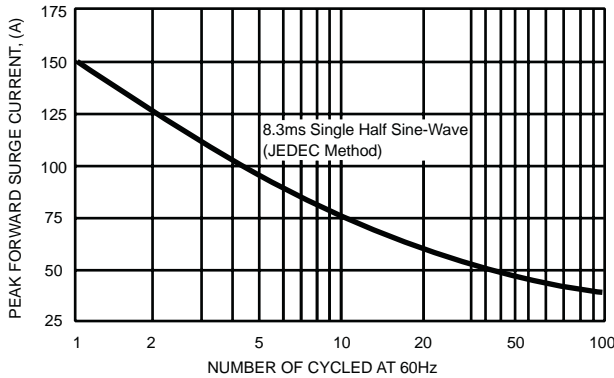


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

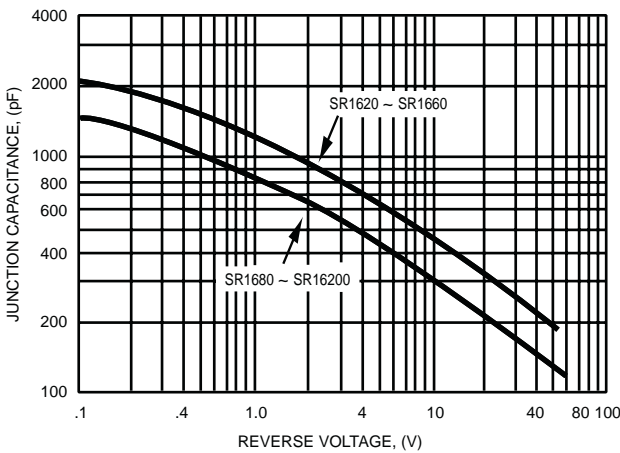
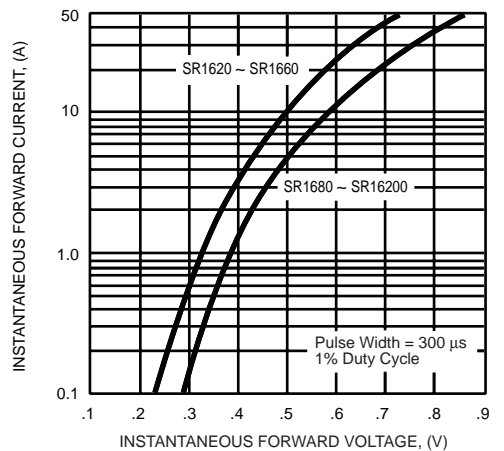


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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