



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SR1620
THRU
SR16100

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 100 Volts

CURRENT - 16 Amperes

FEATURES

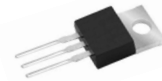
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High switching capability
- * High surge capability
- * High reliability

MECHANICAL DATA

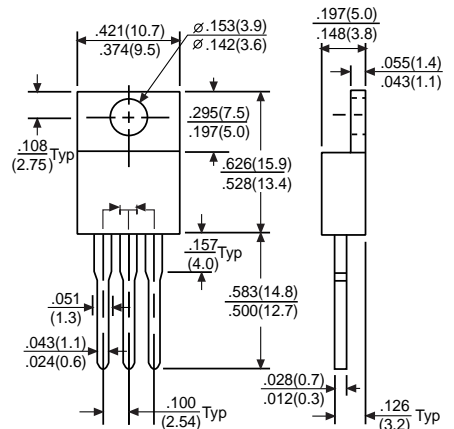
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 2.24 gram

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	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I _O	16							Amps
Peak Forward Surge Current I _{FSM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							Amps
Maximum Forward Voltage at 8.0A DC	V _F	0.65		0.75		0.85		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T _C = 25°C	2.0							mAmps
	@ T _C = 100°C	50							
Typical Thermal Resistance (Note 1)	R _{θJC}	3.5							°C/W
Typical Junction Capacitance (Note 2)	C _J	700							pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 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.: SR1620F, SR1630F,etc)

RATING AND CHARACTERISTIC CURVES (SR1620 THRU SR16100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

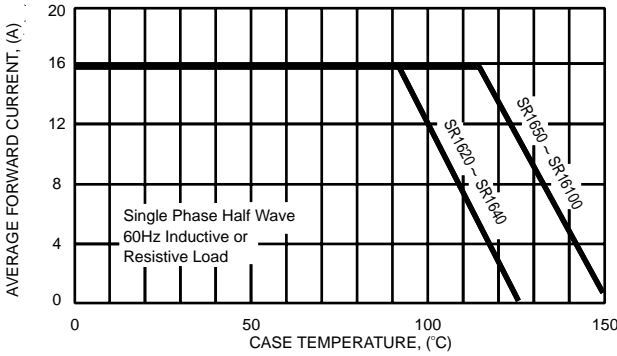


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

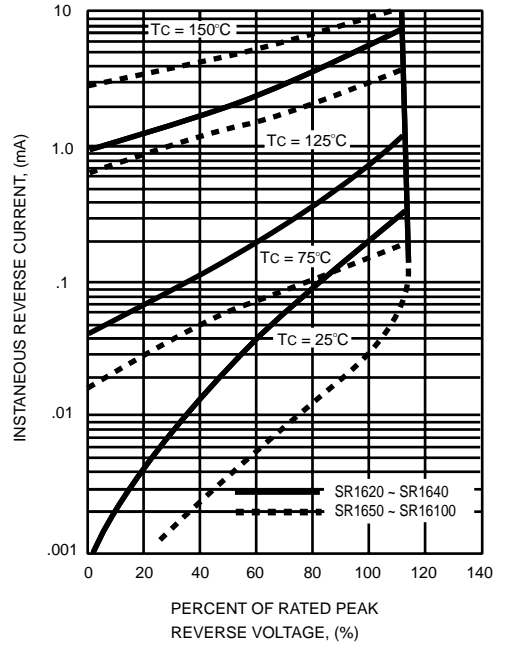


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

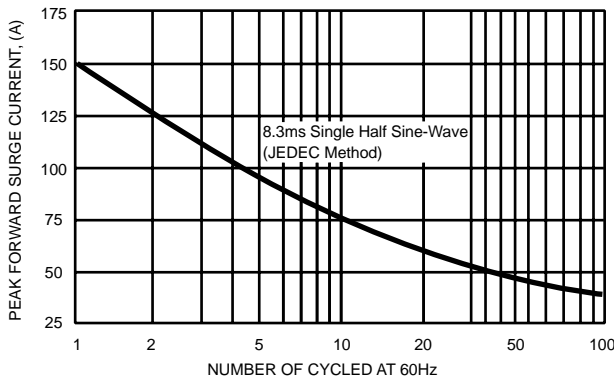


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

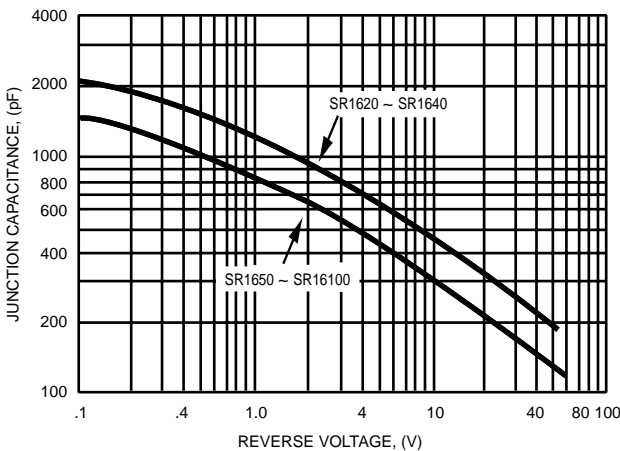


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

