DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SR3020 THRU SR3060

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

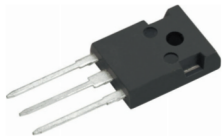
VOLTAGE RANGE - 20 to 60 Volts *CURRENT - 30 Amperes*

FEATURES

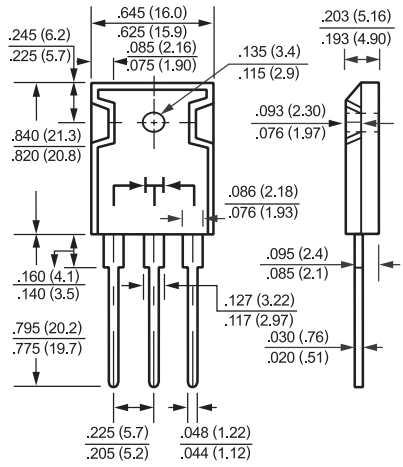
* Low switching noise
* Low forward voltage drop
* Low thermal resistance
* High current capability
* High switching capability
* High surge capabitity
* High reliability

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: MIL-STD-202E, Method 208 guaranteed
* Polarity: As marked
* Mounting position: Any
* Weight: 5.60 grams



TO-3P



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		SYMBOL	SR3020	SR3030	SR3040	SR3050	SR3060	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage		V_{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage		V_{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature		I_O	30					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	300					Amps
Maximum Instantaneous Forward Voltage at 15.0A DC		V_F	.65				.75	Volts
Maximum DC Reverse Current	@T_C = 25°C	I_R	5					mAmps
at Rated DC Blocking Voltage	@T_C = 100°C		100					mAmps
Typical Thermal Resistance (Note 1)		$R_{\theta JC}$	1.4					°C/W
Operating Temperature Range		T_J	-65 to + 150					°C
Storage Temperature Range		T_{STG}	-65 to + 150					°C

NOTES : 1. Thermal Resistance Junction to Case per leg.
2. Suffix "A" = Common Anode.

NEXT BACK EXIT

RATING AND CHARACTERISTIC CURVES (SR3020 THRU SR3060)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

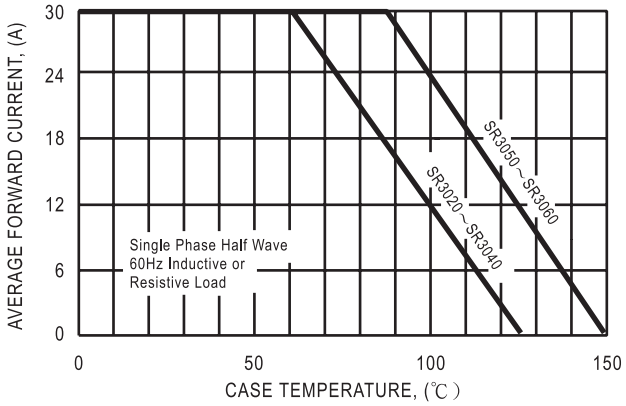


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

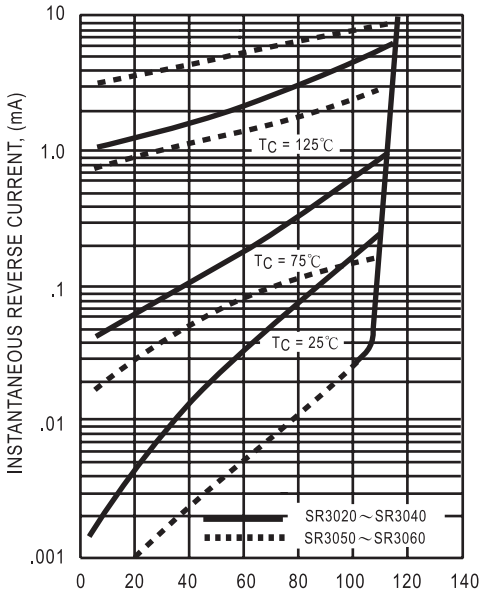


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

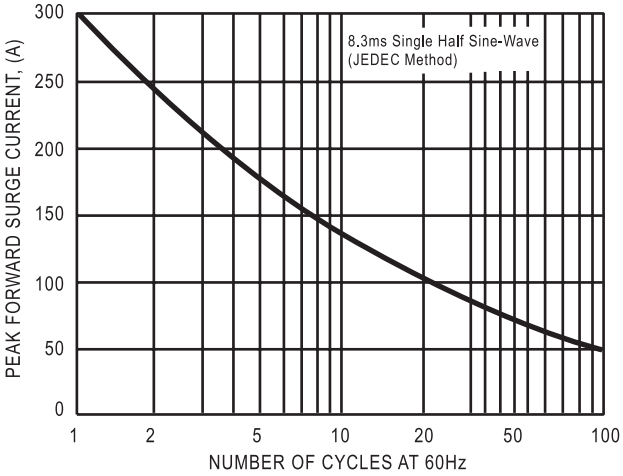


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

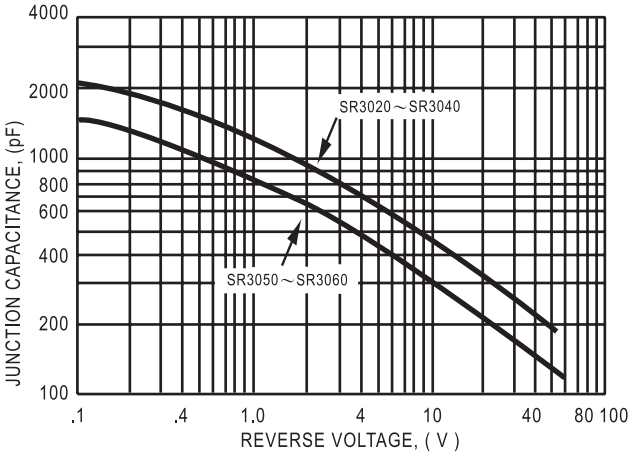


FIG.5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

