

# DC COMPONENTS CO., LTD.

# RECTIFIER SPECIALISTS

SR220 THRU SR2100

# TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER VOLTAGE RANGE - 20 to 100 Volts CURRENT - 2.0 Ampere

## **FEATURES**

- \* Low switching noise
- \* Low forward voltage drop
- \* 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

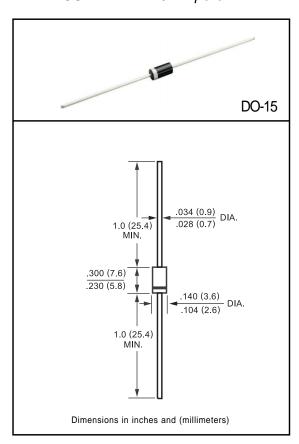
\* Polarity: Color band denotes cathode end

\* Mounting position: Any

\* Weight: 0.4 gram

### 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	SR220	SR230	SR240	SR250	SR260	SR280	SR2100	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage		VRMS	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage		VDC	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current .375*(9.5mm) lead length		lo	2.0						Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		lfsm	50						Amps	
Maximum Instantaneous Forward Voltage at 2.0A DC		VF		.55 .70 .85		35	Volts			
Maximum DC Reverse Current	@TA = 25°C	IR	1.0							mAmps
at Rated DC Blocking Voltage	@TA = 100°C	IR IR	20							mAmps
Typical Thermal Resistance (Note 1)		RθJA	50						°C/W	
Typical Junction Capacitance (Note 2)		CJ	110							pF
Operating Temperature Range		TJ	-50 to + 125							°C
Storage Temperature Range		Тѕтс	-65 to + 150						٥C	

NOTES: 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.375"(9.5mm) Lead Length.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

### RATING AND CHARACTERISTIC CURVES (SR220 THRU SR2100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

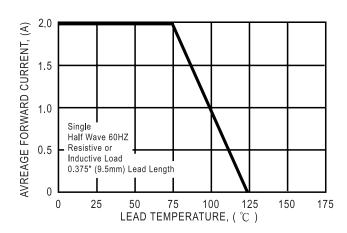
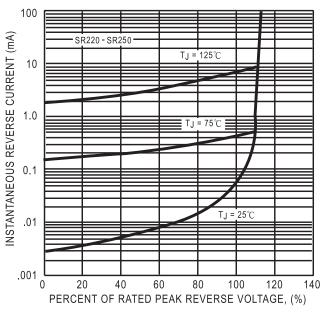


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS INSTANTANEOUS FORWARD CURRENT, (A) 20 10 SR220 1.0 SR250 SR260 SR2100 Pulse Width = 300uS 1% Duty Cycle .7 .5 .9 1.1 1.3 1.5 INSTANTANEOUS FORWARD VOLTAGE, (V)

FIG. 3A - TYPICAL REVERSE CHARACTERISTICS



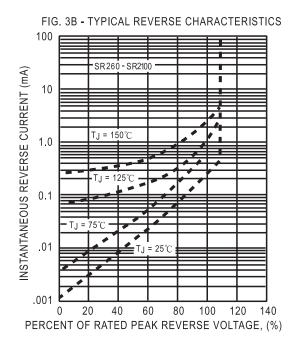


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

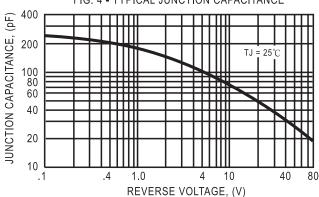
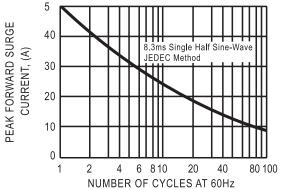


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT





DC COMPONENTS CO., LTD.