

# SR220 THRU SR2100

## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage – 20 to 100 Volts

Forward Current – 2.0 Amperes

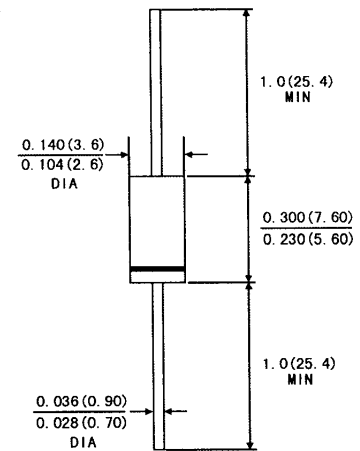
### Features

- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Metal silicon junction, majority carrier conduction

### Mechanical Data

- **Case:** Molded plastic, DO-15.
- **Terminals:** Axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

### DO-15



Dimensions in inches and (millimeters)

### Maximum Ratings and Characteristics

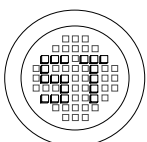
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%.

	Symbols	SR 220	SR 230	SR 240	SR 250	SR 260	SR 280	SR 2100	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	57	71	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum forward voltage at 2 A <sup>1)</sup>	$V_F$	0.55		0.7		0.85			V
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_L = 75\text{ °C}$	$I_{(AV)}$	2							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50							A
Maximum reverse current at rated DC blocking voltage <sup>1)</sup>	$T_A = 25\text{ °C}$	1							mA
	$T_A = 100\text{ °C}$	10							
Typical junction capacitance <sup>3)</sup>	$C_J$	170							pF
Typical thermal resistance <sup>2)</sup>	$R_{\theta JA}$	35							°C/W
Operating and storage temperature range	$T_J, T_S$	-65 to +125							°C

<sup>1)</sup> Pulse test: 300µs pulse width, 1% duty cycle

<sup>2)</sup> Thermal resistance from junction to lead, and/or to ambient P.C.B mounted with 0.375"(9.5mm) lead length with 1.5 X 1.5"(38mm X 38mm) copper pads

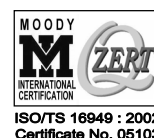
<sup>3)</sup> Measure at 1MHz and reverse voltage of 4V.



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Dated : 09/11/2005 J

# SR220 THRU SR2100

## RATINGS AND CHARACTERISTIC CURVES SR220 THRU SR2100

FIG.1-FORWARD CURRENT DERATING CURVE

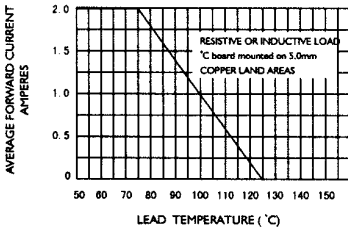


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

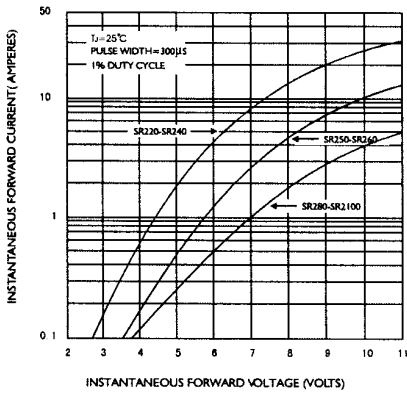


FIG.5-TYPICAL JUNCTION CAPACITANCE

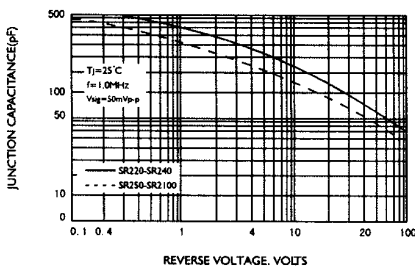


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

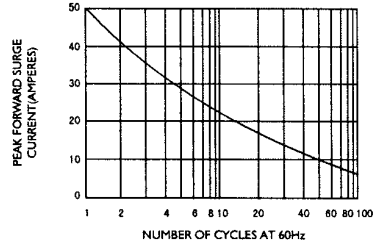
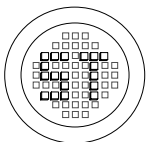
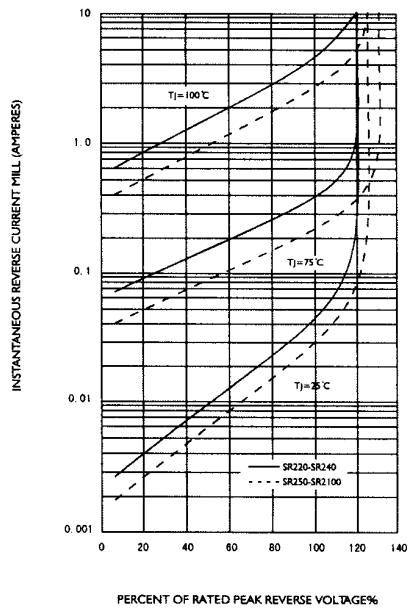


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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