

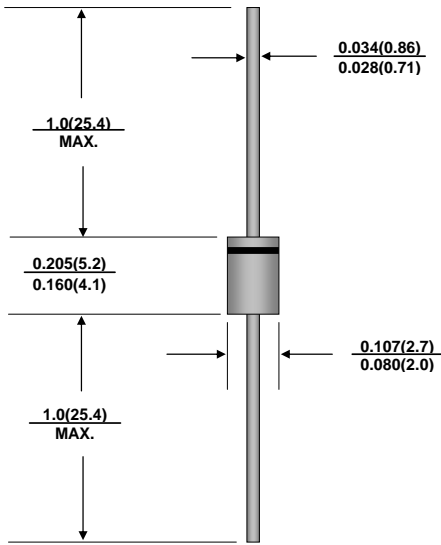


# SR220 THRU SR2200

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 2.0 Ampere

### DO-41



Dimensions in inches and (millimeters)

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0.
- ◆ Metal silicon junction, majority carrier conduction.
- ◆ Low power loss, high efficiency.
- ◆ High forward surge current capability.
- ◆ High temperature soldering guaranteed: 250 °C/10 seconds, 0.375"(9.5mm) lead length,

### MECHANICAL DATA

**Case:** JEDEC DO-41 molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.014 ounce, 0.40 grams

### 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 current derate by 20%.

PARAMETER	SYMBOLS	SR 220	SR 230	SR 240	SR 250	SR 260	SR 270	SR 280	SR 290	SR2100	SR2150	SB2200	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	70	80	90	100	150	200	Volts	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	49	56	63	70	105	140	Volts	
Maximum DC blocking voltage	$V_R$	20	30	40	50	60	70	80	90	100	150	200	Volts	
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{F(AV)}$	2.0											Amp	
Peak forward surge current at 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50.0											Amps	
Maximum Forward Voltage at $I_F=2.0A$	$V_F$	0.5		0.70		0.85		0.92					Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$			10.0		5.0							$\mu A$	
Typical Junction Capacitance (NOTE 1)	$C_J$	220		150									pF	
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	50											°C/W	
Operating Junction Temperature Range	$T_J$	-65 to +125					-65 to +150							°C
Storage Temperature Range	$T_{STG}$	-65 ~ +150											°C	

- Note:**
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
  2. Mounted with minimum recommended padsize, PCBoard FR4.
  3.  $T_J=25^\circ C$  unless otherwise specified.



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## RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

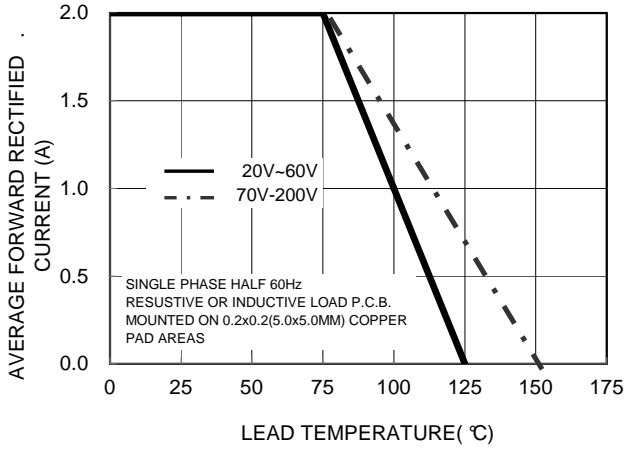


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

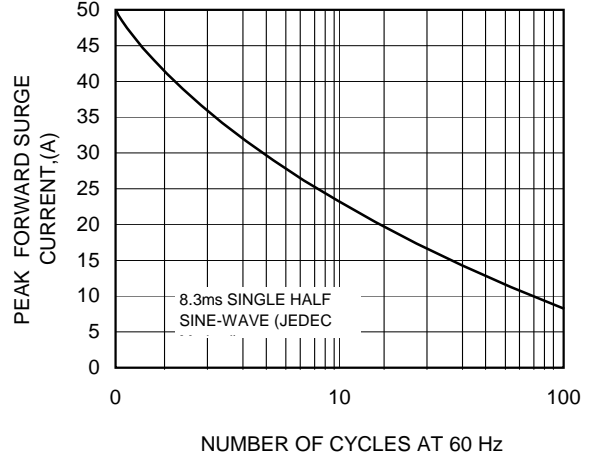


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

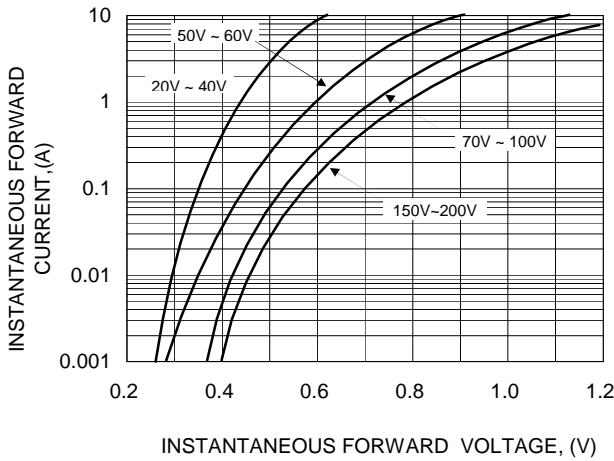


FIG. 4-TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

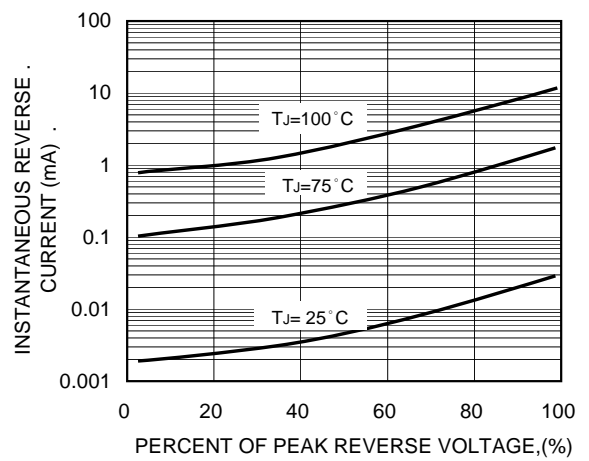


FIG. 5-TYPICAL JUNCTION CAPACITANCE

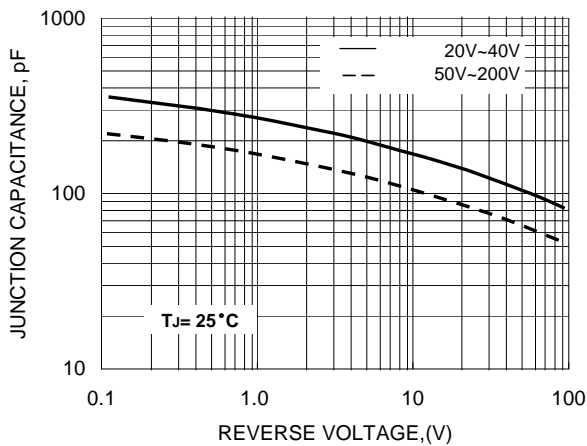


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

