

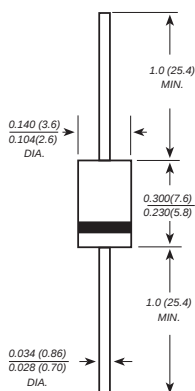


SR220 THRU SR2200

SCHOTTKY BARRIER RECTIFIER

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

DO-15



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,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-15 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%.

YXW Catalog Number	SYMBOLS	SR 220	SR 230	SR 240	SR 250	SR 260	SR 270	SR 280	SR 290	SR 2100	SR 2150	SR 2200	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 _{DC}	20	30	40	50	60	70	80	90	100	100	200	VOLTS	
Maximum average forward rectified current 0.375”(9.5mm) lead length(see fig.1)	I _(AV)	2.0											Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60.0											Amps	
Maximum instantaneous forward voltage at 2.0A	V _F	0.55			0.70			0.85				0.95	Volts	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5							0.2		2.0		mA	
		10.0				5.0								
Typical junction capacitance (NOTE 1)	C _J	220			80									pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0											°C/W	
Operating junction temperature range	T _J	-65 to +125					-65 to +150					°C		
Storage temperature range	T _{STG}	-65 to +150											°C	

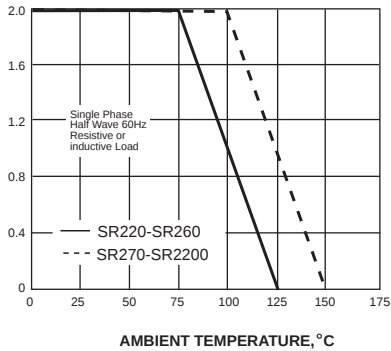
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES SR220 THRU SR2200

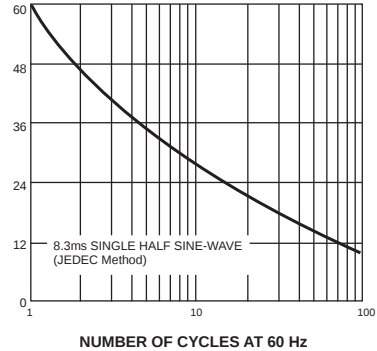
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



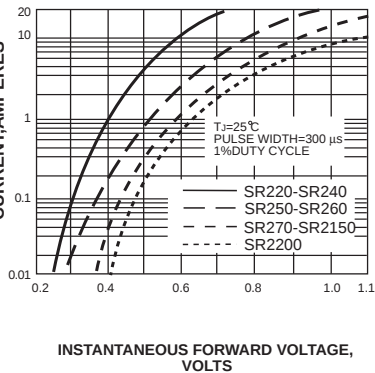
PEAK FORWARD SURGE CURRENT,
AMPERES

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



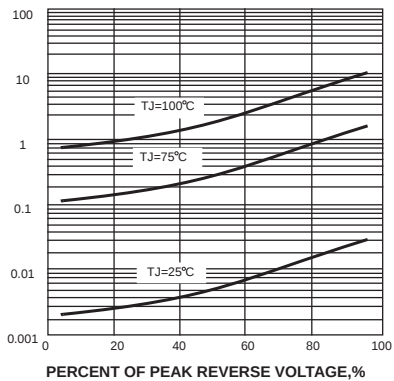
INSTANTANEOUS FORWARD
CURRENT,AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



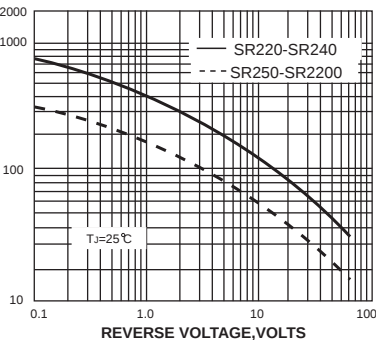
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

