



SR320 THRU SR3200

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 Ampere

SCHOTTKY BARRIER RECTIFIER

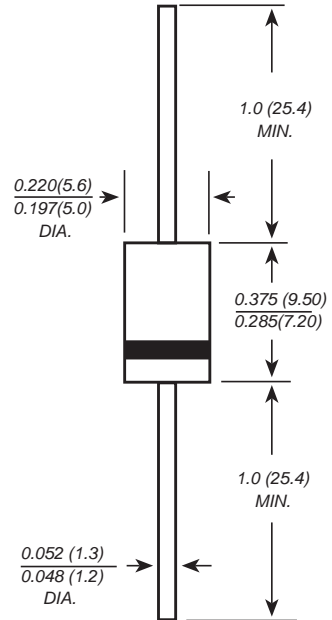
Features

- ◆ 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-201AD Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.04 ounce, 1.10 grams

DO-201AD



Dimensions in inches and (millimeters)

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 320	SR 330	SR 340	SR 350	SR 360	SR 370	SR 380	SR 390	SR 3100	SR 3150	SR 3200	UNITS	
		MDD SR 320	MDD SR 330	MDD SR 340	MDD SR 350	MDD SR 360	MDD SR 370	MDD SR 380	MDD SR 390	MDD SR 3100	MDD SR 3150	MDD SR 3200		
Maximum repetitive peak reverse voltage	V_{RMM}	20	30	40	50	60	70	80	90	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	150	200	V	
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig.1)	$I_{(AV)}$	3.0											A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80											A	
Maximum instantaneous forward voltage at 3.0A	V_F	0.55			0.70			0.85			0.95		V	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5										0.2	mA	
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		10.0					5.0					2.0		
Typical junction capacitance (NOTE 1)	C_J	250				160								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	40.0											°C/W	
Operating junction and storage	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

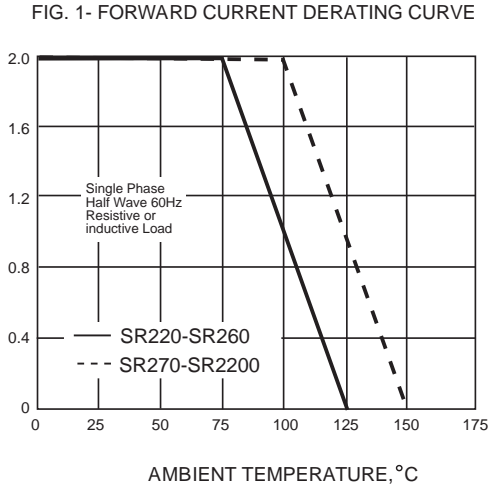


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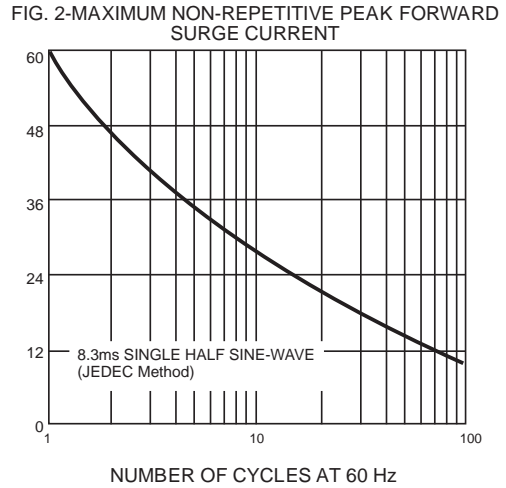
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Ratings And Characteristic Curves

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

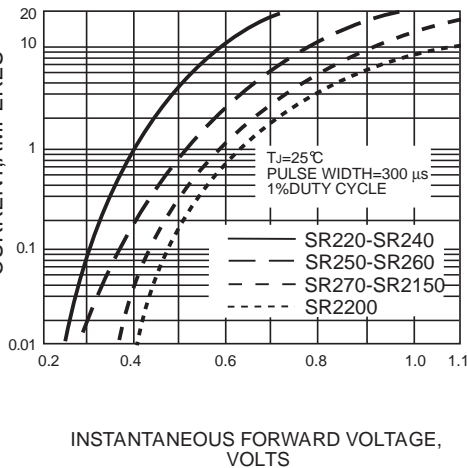


PEAK FORWARD SURGE CURRENT, AMPERES



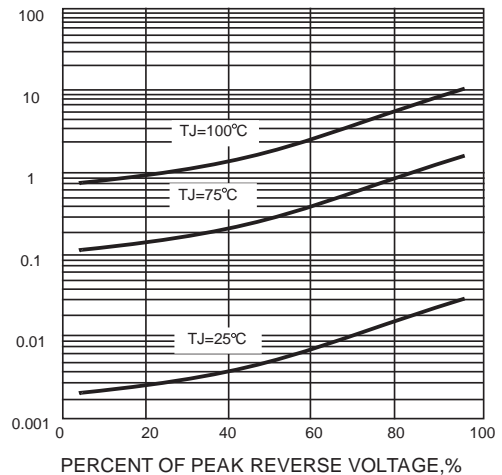
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



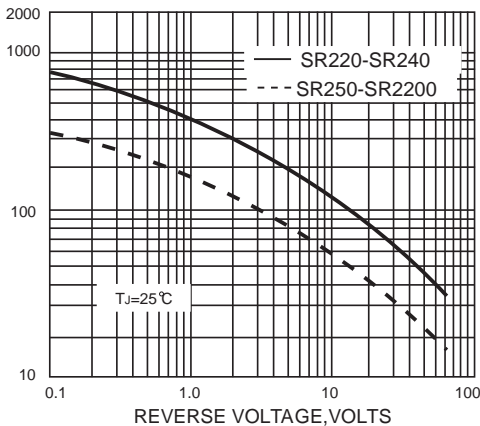
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



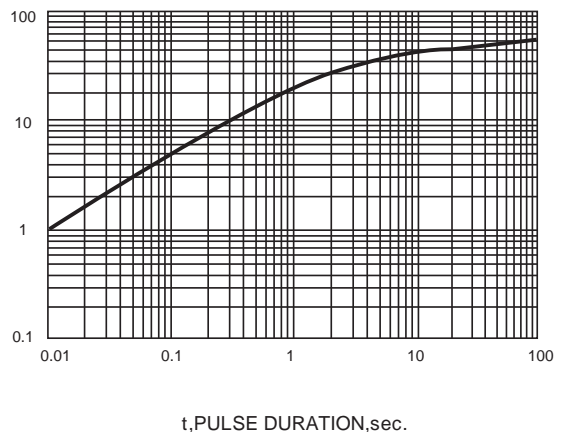
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.

