



# SR320 THRU SR3200

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

## SCHOTTKY BARRIER RECTIFIER

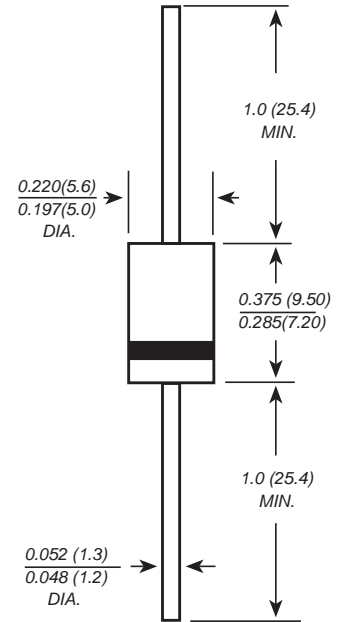
### Features

- ◆ 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** : Color band denotes cathode end  
**Mounting Position** : Any  
**Weight** : 0.04 ounce, 1.10 grams

DO-201AD **ROHS COMPLIANT**



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	$V_{RRM}$	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
		20.0			10.0			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	$T_J$	-50 to +125					-50 to +150						°C
Storage temperature range	$T_{STG}$	-50 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



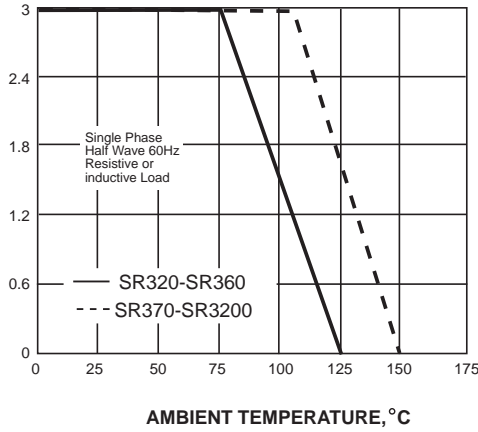
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## Ratings And Characteristic Curves

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

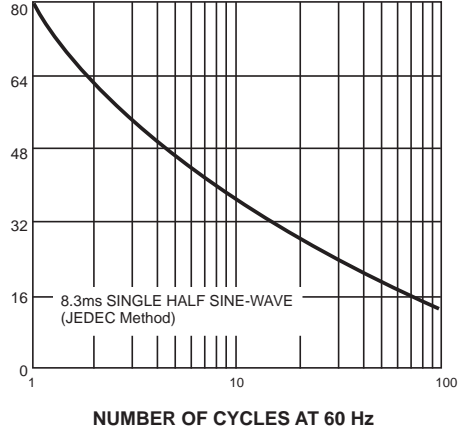


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

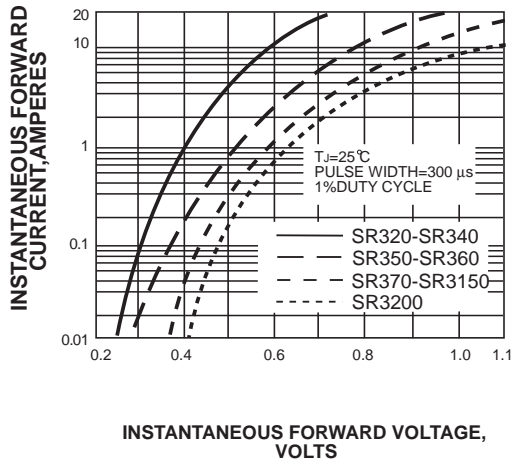


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

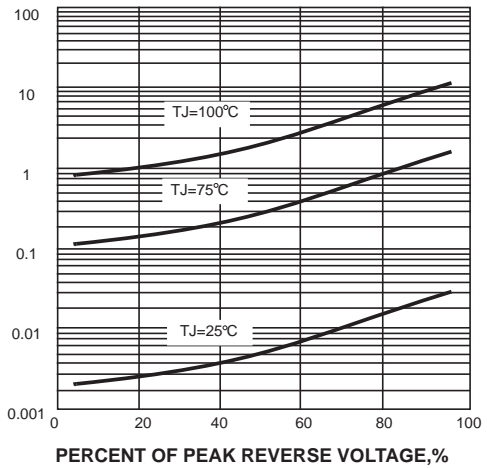
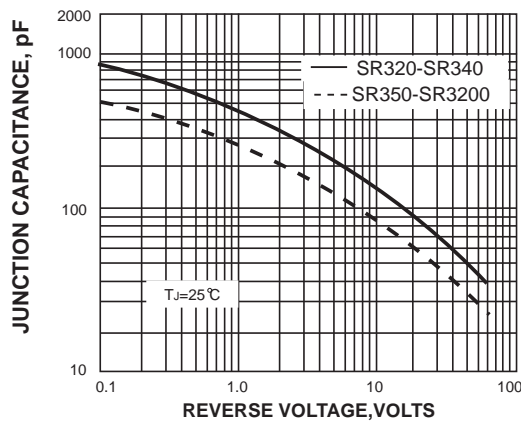
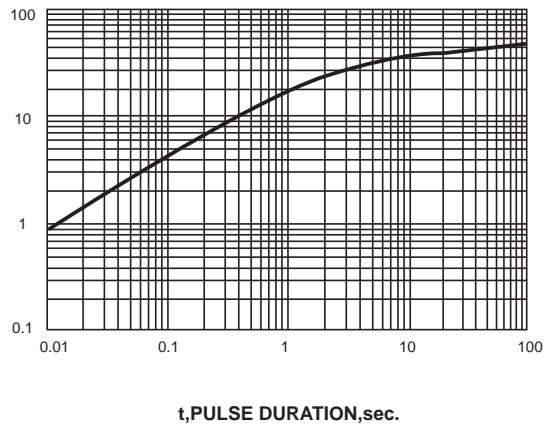


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

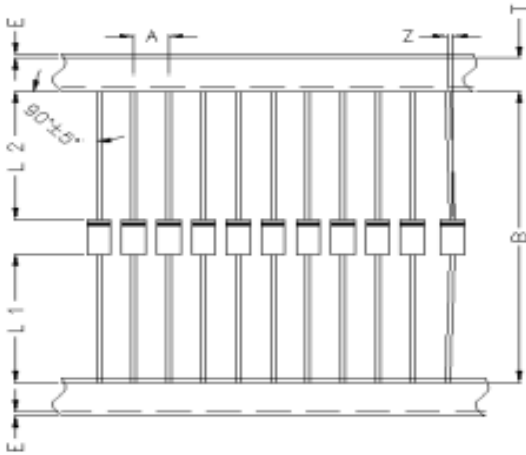
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.

## Package Information

### Taping Specifications



Item	Symbol	Specifications(mm)
Component Pitch	A	10.0±0.5
Inner Tape Pitch	B	52.4±1.5
Component alignment	Z	1.2 Max
Tape width	T	6.0±0.5
Exposed adhesive	E	0.8 Max
Body eccentricity	L1-L2	1.0 Max

### Ammunition Package Specifications

Package	Inner Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
DO - 201AD	255*74*145	1000	410*275*340	10000

### Bulk Package Specifications

Package	Inner Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
DO - 201AD	198*86*21	200	460*220*250	10000

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