

## 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

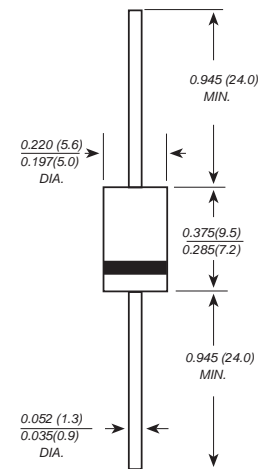
**Case** : JEDEC DO-201AD plastic body

**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



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	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	UNITS	
		320	330	340	350	360	370	380	390	3100	3150	3200		
Marking Code		SR 320	SR 330	SR 340	SR 350	SR 360	SR 370	SR 380	SR 390	SR 3100	SR 3150	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	
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		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.

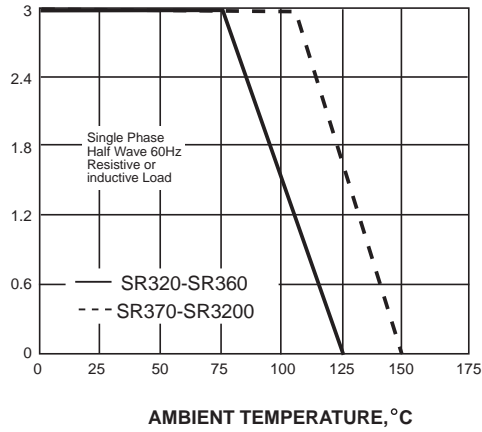
2. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B. mounted



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

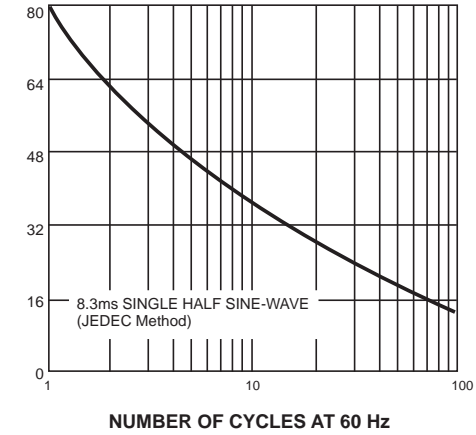
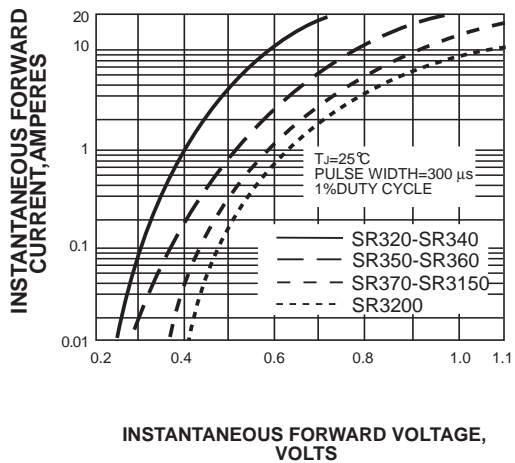


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

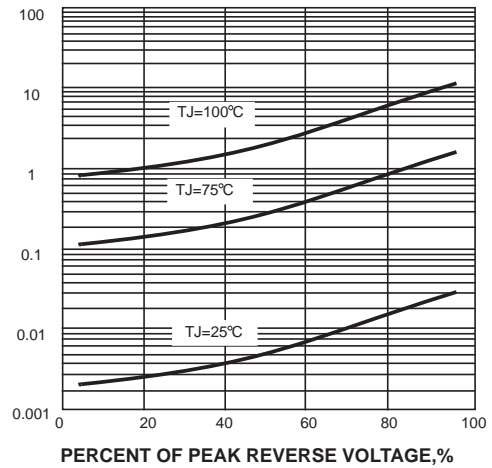
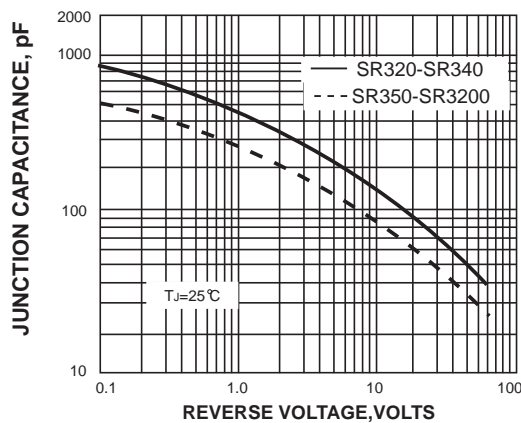


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

