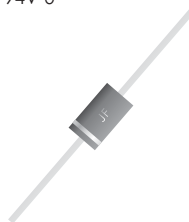
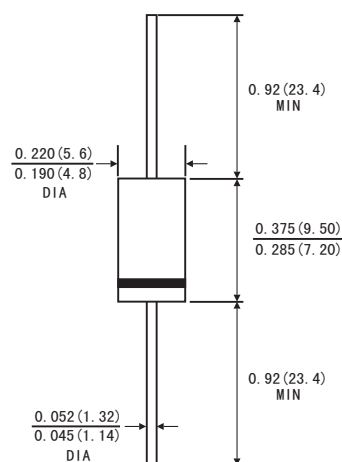


### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



### DO-201AD



Dimensions in inches and (millimeters)

### MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041ounce, 1.15 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SR 520	SR 530	SR 540	SR 560	SR 5100	SR 5150	SR 5200	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	60	100	150	200	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	42	71	105	140	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{(AV)}$	5.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated $T_J$ )	$I_{FSM}$	150.0							Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1 )	$V_F$	0.55		0.70		0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A=25^{\circ}C$	100			20				$\mu A$
	$T_A=100^{\circ}C$	5			-				mA
	$T_A=125^{\circ}C$	-			3				
Typical junction capacitance(Note 3)	$C_J$	500				400			Pf
Typical thermal resistance (Note 2)	$R_{\theta JA}$	25.0							$^{\circ}C/W$
	$R_{\theta JL}$	8.0							
Operating junction temperature range	$T_J$	-55 to+150							$^{\circ}C$
Storage temperature range	$T_{STG}$	-55 to+150							$^{\circ}C$

**Notes:** 1.Pulse test: 300  $\mu s$  pulse width,1% duty cycle

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

3.Measured at 1MHz and reverse voltage of 4.0 volts

# RATINGS AND CHARACTERISTIC CURVES SR520 THRU SR5200

FIG.1-FORWARD CURRENT DERATING CURVE

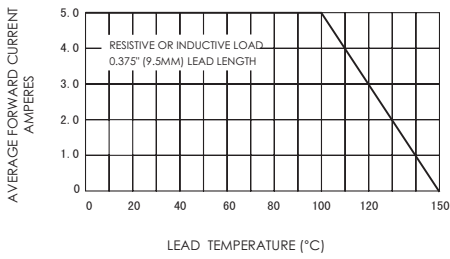


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

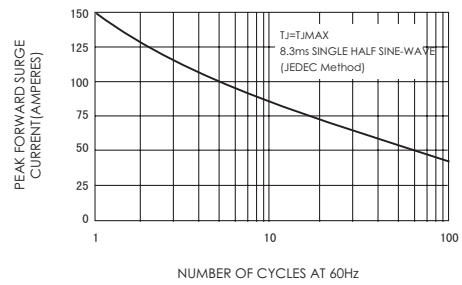


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

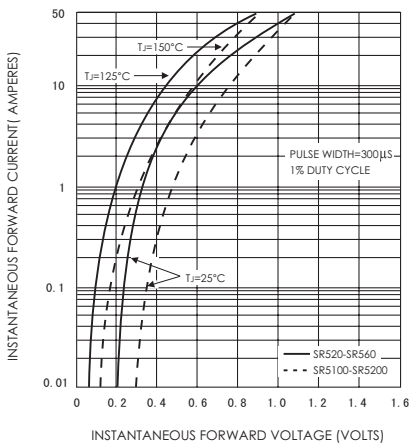


FIG.4-TYPICAL REVERSE CHARACTERISTICS

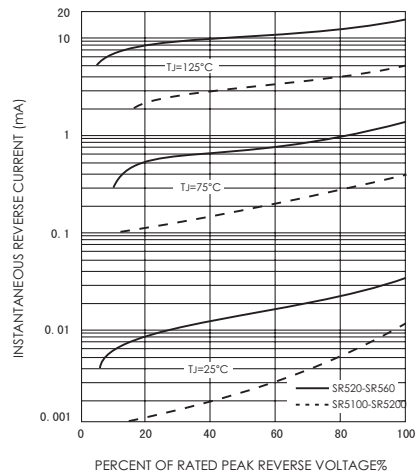


FIG.5-TYPICAL JUNCTION CAPACITANCE

