

## FEATURES

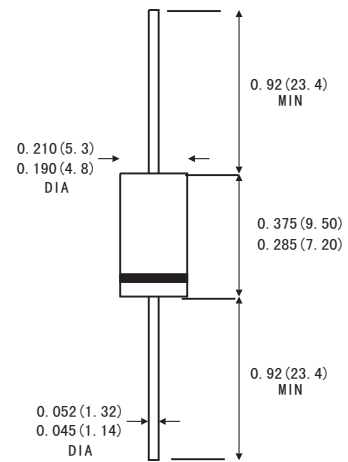
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- For use in low 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 2002/95/EC and WEEE 2002/96/EC

## 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



### 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 ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SR 5250		Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	250		Volts
Maximum RMS voltage	$V_{RMS}$	175		Volts
Maximum DC blocking voltage	$V_{DC}$	250		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 $T_J$ )	$I_{FSM}$	120.0		Amps
	Symbols	TYP.	MAX.	Units
Instantaneous forward voltage at 5.0 A(Note 1 )	$V_F$	0.83	0.9	Volts
Reverse current at rated DC blocking voltage(Note 1)	$I_R$	$T_A=25^\circ\text{C}$	0.5	$\mu\text{A}$
		$T_A=125^\circ\text{C}$	1	mA
Typical junction capacitance(Note 3)	$C_J$	400		PF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	25.0		°C/W
	$R_{\theta JL}$	8.0		
Operating junction temperature range	$T_J$	-55 to+175		°C
Storage temperature range	$T_{STG}$	-55 to+175		°C

**Notes:** 1.Pulse test: 300  $\mu\text{s}$  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 SR5250

FIG.1-FORWARD CURRENT DERATING CURVE

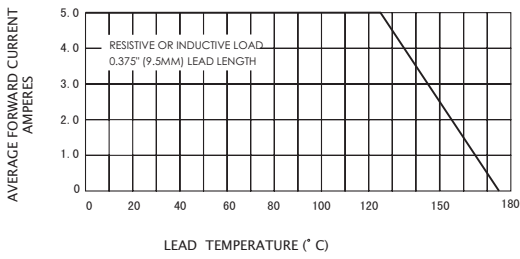


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

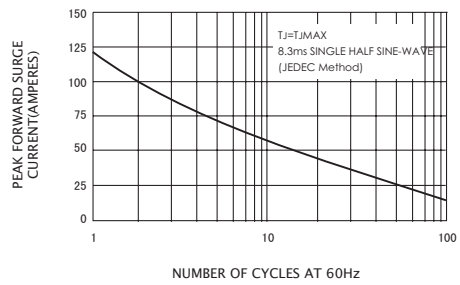


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

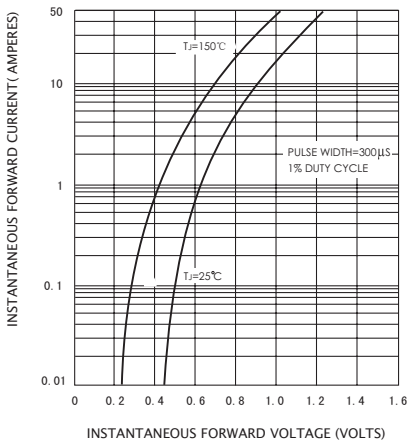


FIG.4-TYPICAL REVERSE CHARACTERISTICS

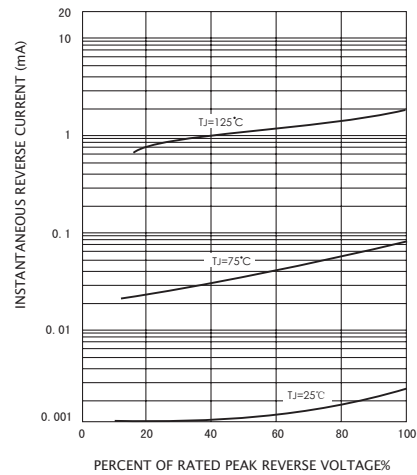


FIG.5-TYPICAL JUNCTION CAPACITANCE

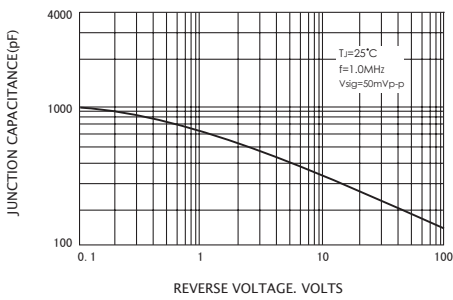


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

