

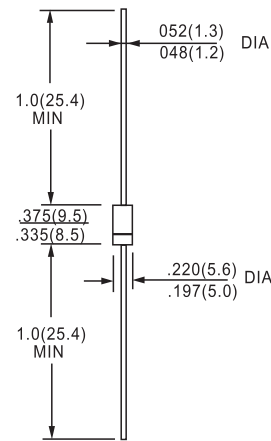
FEATURES

- 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

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:* 0.014ounce, 0.39 gram

DO-27



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 320 | SR 330 | SR 340 | SR 350 | SR 360 | SR 380 | SR 3100 | SR 3150 | SR 3200 | Units |
|--|-------------------|------------|--------|--------|--------|--------|--------|---------|---------|---------|-------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum RMS voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 57 | 71 | 105 | 140 | Volts |
| Maximum DC blocking voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum average forward rectified current 0.375"(9.5mm) lead length (See Fig.1) | I _(AV) | 3.0 | | | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 80.0 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 3.0 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) | I _R | 0.2 | | | | | | | | | mA |
| | | 20 | | | 10 | | | | | | |
| Typical junction capacitance(Note 3) | C _J | 250 | | | 160 | | | | | | pF |
| Typical thermal resistance (Note 2) | R _{θJA} | 40.0 | | | | | | | | | °C/W |
| | R _{θJL} | 10.0 | | | | | | | | | |
| Operating junction temperature range | T _J | -65 to+150 | | | | | | | | | °C |
| Storage temperature range | T _{STG} | -65 to+150 | | | | | | | | | °C |

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.5"(12.7mm)lead length with 2.5X2.5"(63.5X63.5mm)copper pads

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

RATINGS AND CHARACTERISTIC CURVES SR320 THRU SR3200

FIG.1-FORWARD CURRENT DERATING CURVE

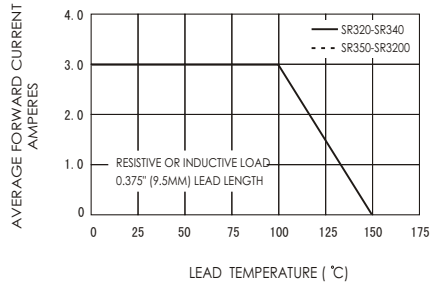


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

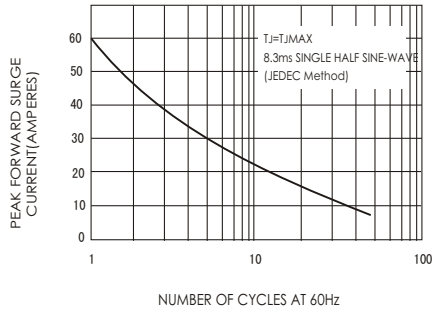


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

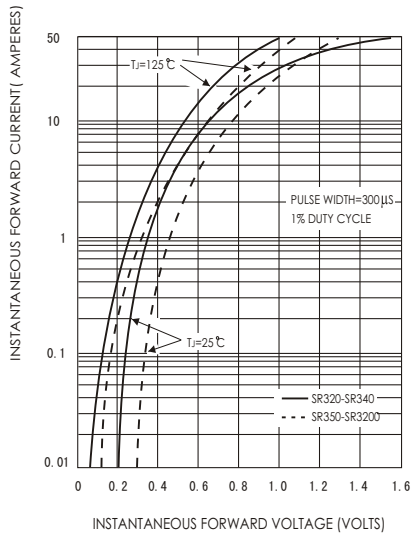


FIG.4-TYPICAL REVERSE CHARACTERISTICS

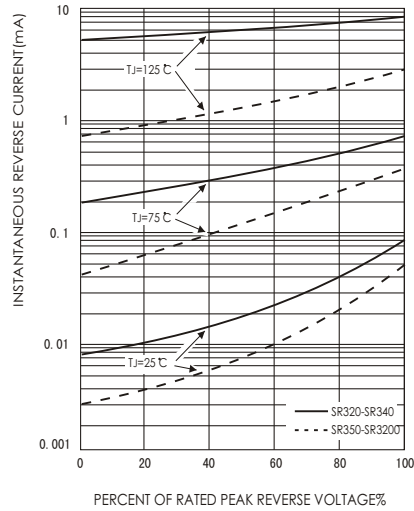


FIG.5-TYPICAL JUNCTION CAPACITANCE

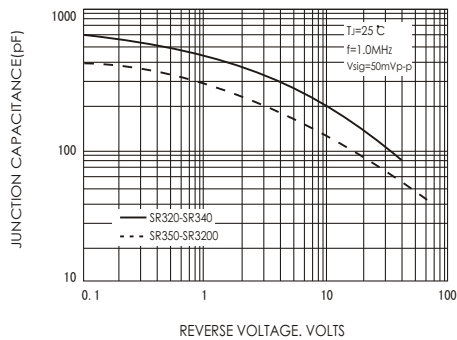


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

