

5.0AMP SCHOTTKY BARRIER RECTIFIERS- 20~200Volts

DO-201AD PACKAGE

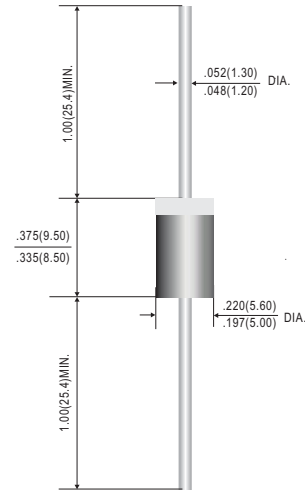


FEATURES

- * High reliability
- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * Moisture Sensitivity Level 1
- * RoHs product for packing code suffix "G",
Halogen free product for packing code suffix "H"



DO-201AD



Dimensions in inches and (millimeters)

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 1.18 gram

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, derate current by 20%

| RATINGS | SYMBOL | SR520 | SR530 | SR540 | SR550 | SR560 | SR580 | SR5100 | SR5150 | SR5200 | UNIT | |
|--|-----------------------------------|-------------|-------|-------|-------|-------|-------|--------|-------------|--------|-------|----|
| Marking Code | | SR520 | SR530 | SR540 | SR550 | SR560 | SR580 | SR5100 | SR5150 | SR5200 | | |
| Maximum Recurrent 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 | 56 | 70 | 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 at TL = 90°C | I _o | 5.0 | | | | | | | | | Amps | |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 150 | | | | | | | | | Amps | |
| Typical Thermal Resistance (Note 1) | R _{θJA} | 18 | | | | | | | | | °C/W | |
| | R _{θJC} | 10 | | | | | | | | | °C/W | |
| Typical Junction Capacitance (Note 2) | C _J | 200 | | | 250 | | | 350 | | | pF | |
| Storage and Operating Temperature Range | T _J , T _{STG} | -65 to +125 | | | | | | | -65 to +150 | | | °C |

| CHARACTERISTICS | SYMBOL | SR520 | SR530 | SR540 | SR550 | SR560 | SR580 | SR5100 | SR5150 | SR5200 | UNIT |
|---|----------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|
| Maximum Instantaneous Forward Voltage at 5.0A DC(Noye) | V _F | 0.55 | | 0.70 | | 0.85 | | 0.87 | | 0.92 | Volts |
| Maximum Average Reverse Current at Rated DC Blocking Voltage | @TA=25°C | 0.5 | | | | | | | | | mAmps |
| | @TA=100°C | 10 | | | | | | | | | |

- NOTES :1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.
Thermal Resistance (Junction to Case).
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Measured at Pulse Width 300µs, Duty Cycle 2%.

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FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

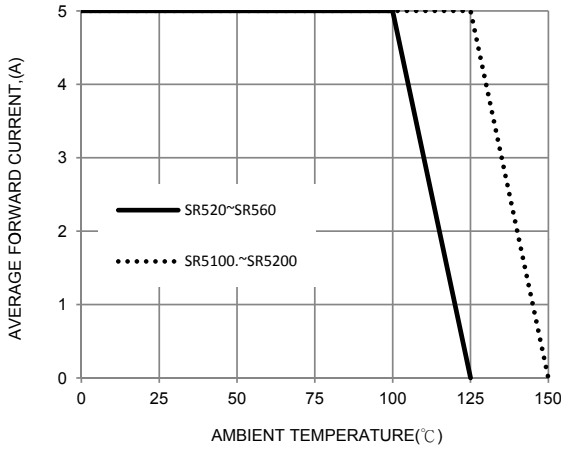


FIG.2 TYPICAL REVERSE CHARACTERISTICS

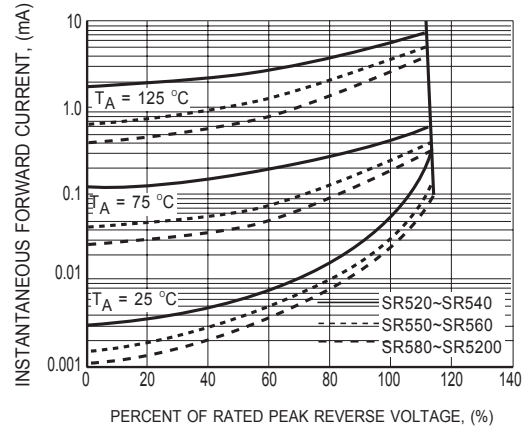


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

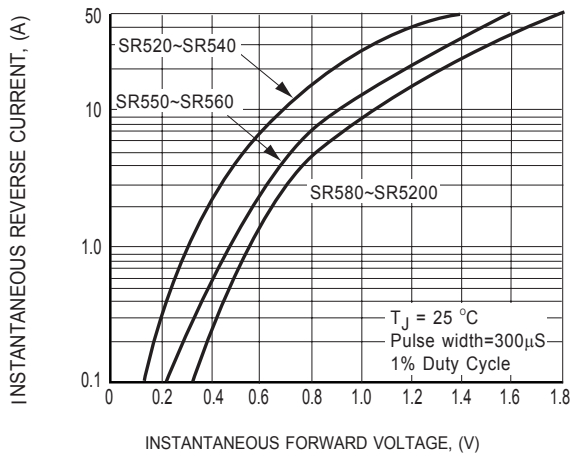


FIG.4 TYPICAL JUNCTION CAPACITANCE

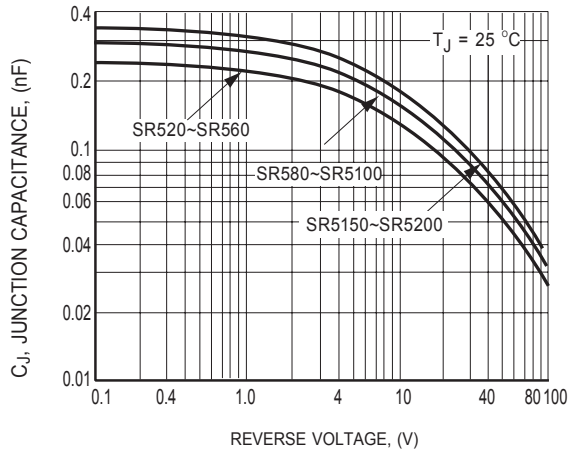


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

