

FEATURES

- | Low Forward Voltage Drop
- | High Forward Surge Capability
- | High Reliability



DO-201



Schematic Symbol

MECHANICAL DATA

- | Case: DO-201 Molded Plastic
- | Polarity: Color Band Denotes Cathode
- | Mounting Position: Any

APPROVALS

| | |
|-------------|------------------------------------|
| RoHS | Compliance with 2011/65/EU |
| HF | Compliance with IEC61249-2-21:2003 |

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

| Parameter | Symbol | 1N5400 | 1N5401 | 1N5402 | 1N5404 | 1N5406 | 1N5407 | 1N5408 | Unit |
|--|-----------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|------|
| Marking | | 1N5400 | 1N5401 | 1N5402 | 1N5404 | 1N5406 | 1N5407 | 1N5408 | |
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| Maximum Average Forward Rectified Current At T _A =75°C | I _{F(AV)} | 3.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3 Ms Singlehalf Sine-wave | I _{FSM} | 200 | | | | | | | |
| Maximum Instantaneous Forward Voltage at 3.0A | V _F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | T _A =25°C | | | | | | | μA |
| | | T _A =100°C | | | | | | | |
| Typical Junction Capacitance (Note1) | C _J | 50 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | R _{θJA} | 20 | | | | | | | °C/W |
| Operating Junction And Storage Temperature Range | T _J , T _{STG} | -55~+150 | | | | | | | °C |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at 375" (9.5mm) lead length, P.C. board mounted.

CHARACTERISTIC CURVES

Fig.1 Typical Forward Current Derating Curve

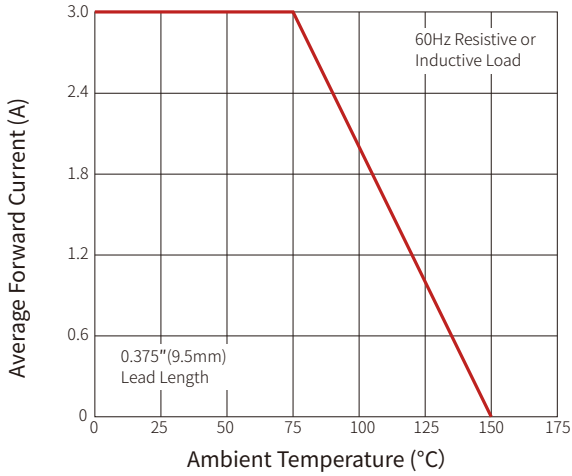


Fig.2 Maximum Non-repetitive Peak Forward Surge Current

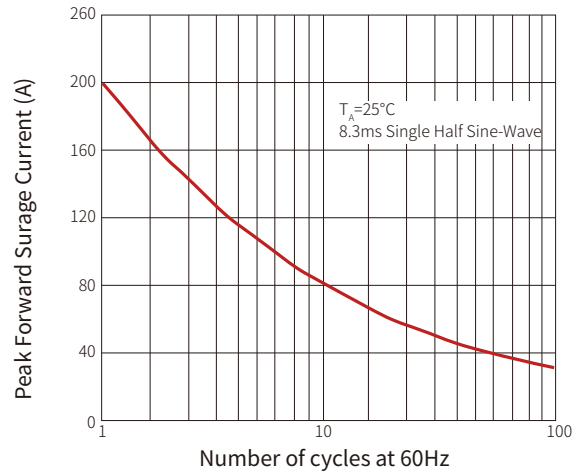


Fig.3 Typical Instantaneous Forward Characteristics

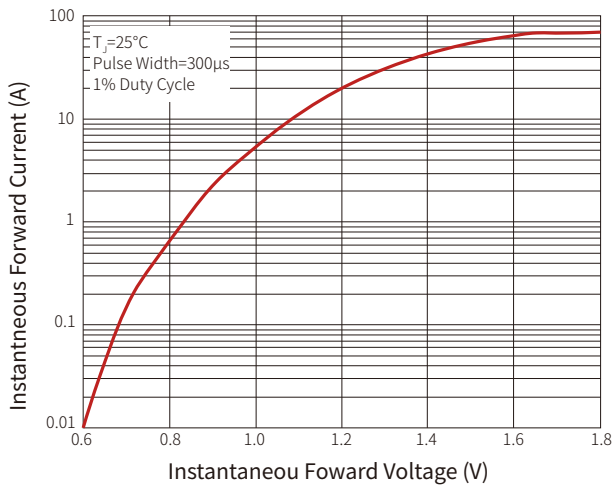


Fig.4 Typical Reverse Characteristics

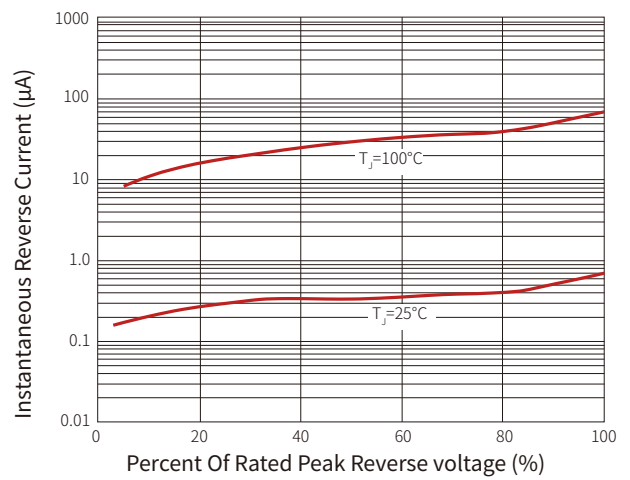
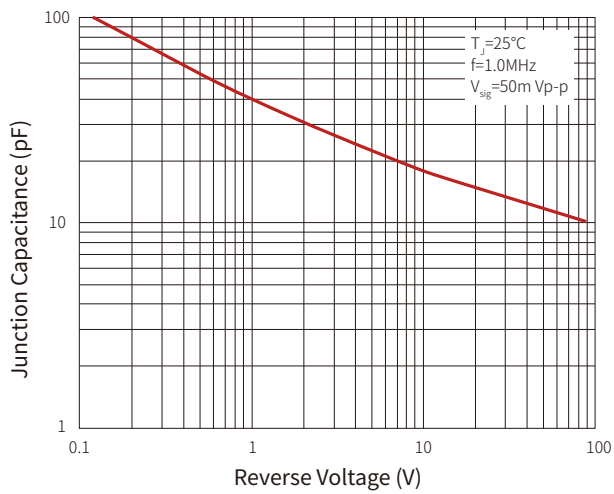
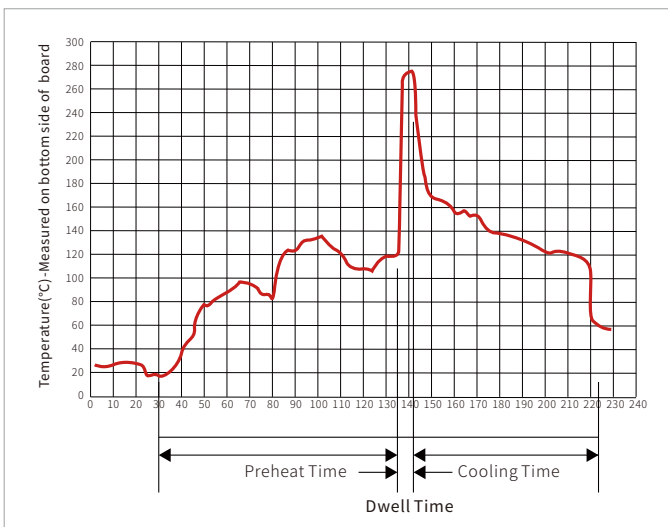


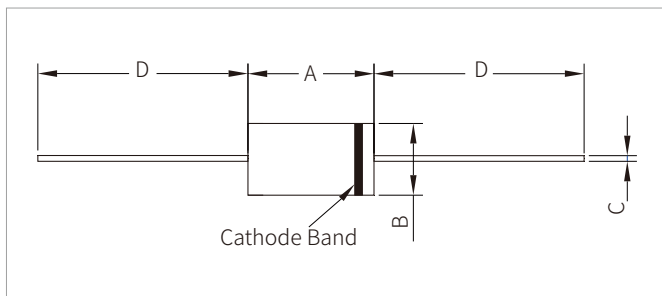
Fig.5 Typical Junction Capacitance


WAVE SOLDERING



| Wave Parameter | | Lead-free assembly |
|------------------------|------------------|--------------------|
| Pre Heat | Temperature Min | 100°C |
| | Temperature Max | 150°C |
| | Time(min to max) | 60 - 180 secs |
| Solder pot Temperature | | 280°C Max |
| Solder Dwell Time | | 2-5 seconds |

DO-201 PACKAGE INFORMATION



| Ref. | Millimeters | | Inches | |
|------|-------------|------|--------|-------|
| | Min. | Max. | Min. | Max. |
| A | 8.50 | 9.50 | 0.335 | 0.375 |
| B | 4.80 | 5.60 | 0.189 | 0.220 |
| C | 1.10 | 1.45 | 0.043 | 0.057 |
| D | 24.00 | - | 0.945 | - |

ORDERING INFORMATION

| Part Number | Component Package | Per Carton | Description |
|---------------|-------------------|------------|-------------|
| 1N5400-1N5408 | DO-201 | 1250pcs | Reel |

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