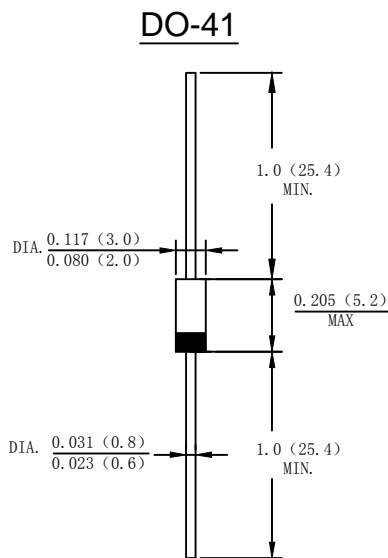


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Exceeds environmental standards of MIL-S-19500/228

Mechanical Data

- Case: Moulded plastic DO-41
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For Rohs/Lead Free Version



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

| Type Number | SYMBOL | SR 120 | SR 130 | SR 140 | SR 150 | SR 160 | SR 180 | SR 1100 | SR 1150 | SR 1200 | SR 1250 | Unit |
|--|-----------------|-------------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | V |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | 175 | V |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | V |
| Average Rectified Output Current (Note 1) @ $T_A = 75^\circ C$ | I_o | 1.0 | | | | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30 | | | | | | | | | | A |
| Forward Voltage @ $I_F = 1.0A$ | V_{FM} | 0.55 | | 0.7 | | 0.85 | | 0.92 | | 0.95 | | V |
| Peak Reverse Current @ $T_A = 25^\circ C$ | I_R | 0.1 | | | | | 0.05 | | | | | mA |
| At Rated DC Blocking Voltage @ $T_A = 100^\circ C$ | | 10.0 | | | | | 5.0 | | | | | |
| Typical Junction Capacitance (Note 2) | C_J | 110 | | | | | | | | | | pF |
| Typical Thermal Resistance Junction to Ambient (Note 1) | $R_{\theta JA}$ | 80 | | | | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | | | $^\circ C$ |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

Fig.1-FORWARD CURRENT DERATING CURVE

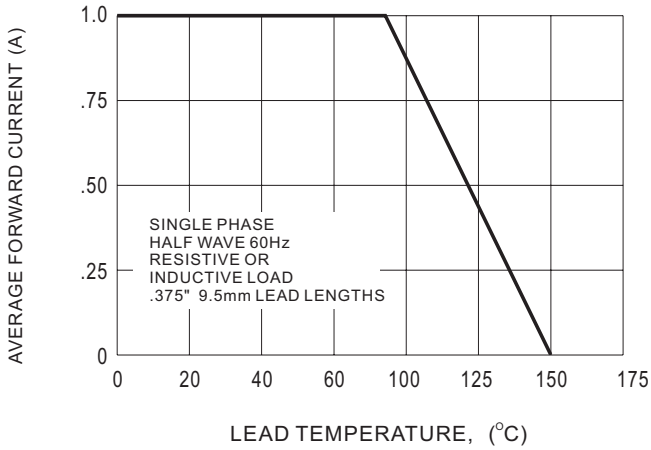


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

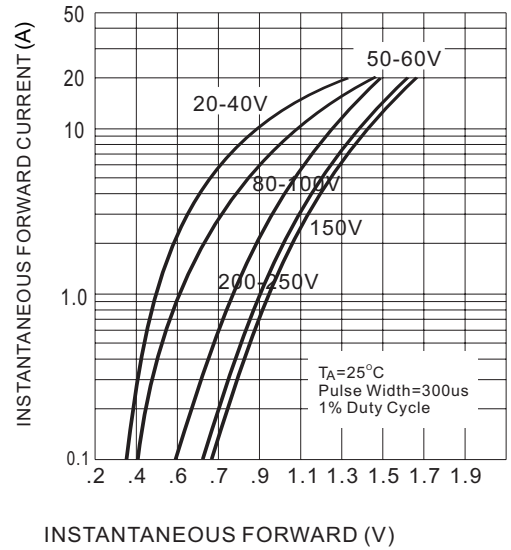


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

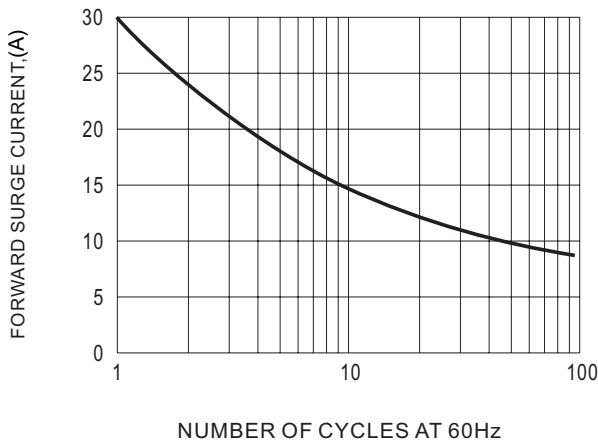


Fig.4-TYPICAL JUNCTION CAPACITANCE

