



FR151G THRU FR157G

GLASS PASSIVATED

FAST RECOVERY RECTIFIER

VOLTAGE: 50 TO 1000V CURRENT: 1.5A

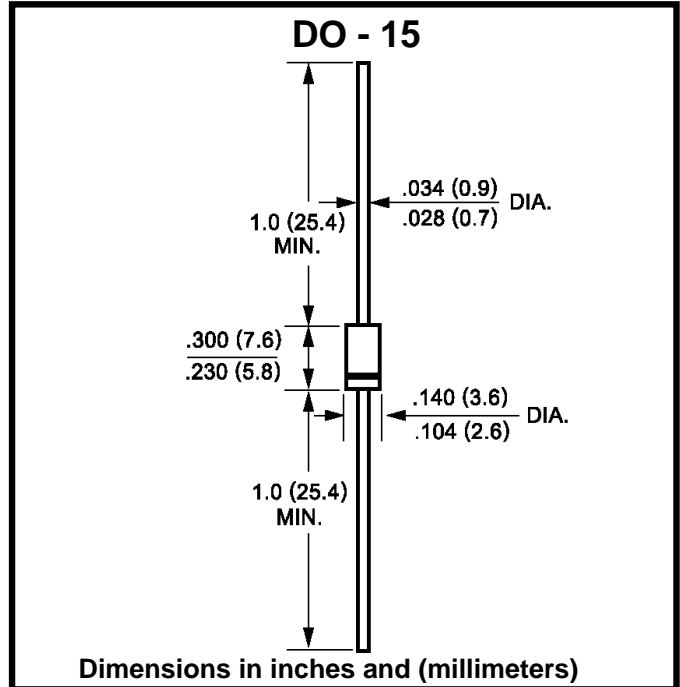
**TECHNICAL
SPECIFICATION**

FEATURES

- Molded case feature for auto insertion
- Glass passivated chip
- High current capability
- Low leakage current
- Fast switching for high efficiency
- High surge capability
- High temperature soldering guaranteed:
250°C/10sec/0.375"(9.5mm) lead length
at 5 lbs tension

MECHANICAL DATA

- Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-O
recognized flame retardant epoxy
- Polarity: Color band denotes cathode
- Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

| RATINGS | SYMBOL | FR | FR | FR | FR | FR | FR | FR | UNITS |
|--|------------------|-------------------------|------|------|------|------|------|------|--------------------|
| | | 151G | 152G | 153G | 154G | 155G | 156G | 157G | |
| Maximum Repetitive 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 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current (9.5mm lead length, at $T_a=55^\circ\text{C}$) | $I_{F(AV)}$ | 1.5 | | | | | | | A |
| Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load) | I_{FSM} | 60.0 | | | | | | | A |
| Maximum Instantaneous Forward Voltage (at rated forward current) | V_F | 1.3 | | | | | | | V |
| Maximum DC Reverse Current (at rated DC blocking voltage) | I_R | $T_a=25^\circ\text{C}$ | | | | | | | μA |
| | | $T_a=100^\circ\text{C}$ | | | | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | t_{rr} | 150 | | | | 250 | 500 | | nS |
| Typical Junction Capacitance (Note 2) | C_J | 20 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | $R_{\theta(ja)}$ | 40 | | | | | | | $^\circ\text{C/W}$ |
| Storage and Operation Junction Temperature | T_{STG}, T_J | -65 to +150 | | | | | | | $^\circ\text{C}$ |

Note:

- 1.Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
- 2.Measured at 1.0 MHz and applied voltage of $4.0V_{dc}$
- 3.Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C. board mounted