



FR201G THRU FR207G

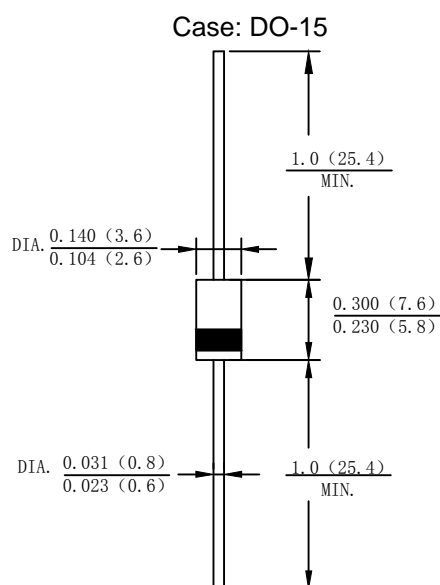
2.0 AMP Glass Fast Recovery Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case: Molded plastic DO-15
- Terminals: Axial leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any



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 | FR 201G | FR 202G | FR 203G | FR 204G | FR 205G | FR 206G | FR 207G | Unit |
|--------------------------------------------------------------------------------------------------|-----------------|--------------|---------|---------|---------|---------|---------|---------|--------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RM} | 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 |
| Average Rectified Output Current (Note 1) @ $T_L = 100^\circ C$ | $I_{F(AV)}$ | 2.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50 | | | | | | | A |
| I^2t Rating for Fusing ($t < 8.3ms$) | I^2t | 10.375 | | | | | | | A^2s |
| Forward Voltage @ $I_F=2.0A$ | V_{FM} | 1.3 | | | | | | | V |
| Peak Reverse Current @ $T_A=25^\circ C$ | I_R | 5.0 | | | | | | | μA |
| At Rated DC Blocking Voltage @ $T_A=125^\circ C$ | | 100 | | | | | | | |
| Maximum Reverse Recovery Time (Note 2) | T_{RR} | 150 | | | 250 | 500 | | nS | |
| Typical Junction Capacitance (Note 3) | C_j | 10 | | | | | | | pF |
| Typical Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 65 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_j | -65 to + 150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -65 to + 150 | | | | | | | $^\circ C$ |

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

2. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $IRR=0.25A$.

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



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Fig. 1 Forward Current Derating Curve

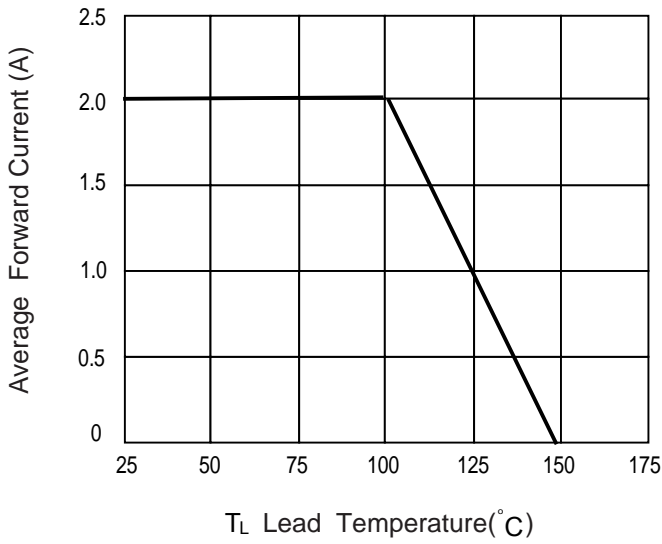


Fig. 2 Typ. Forward Characteristics

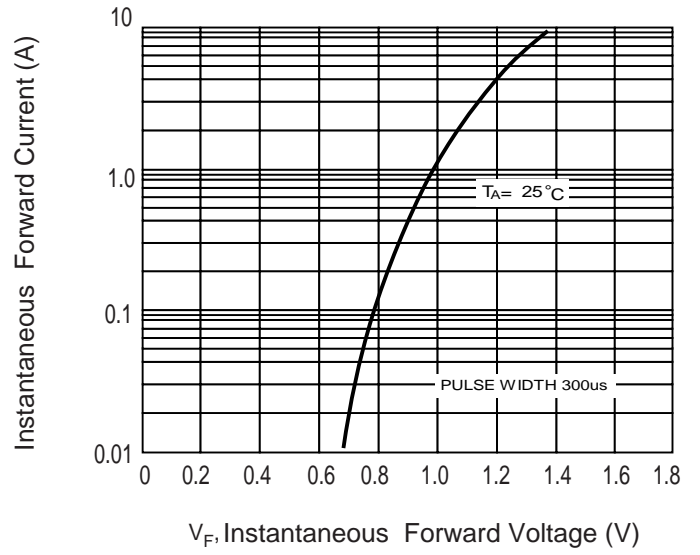


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

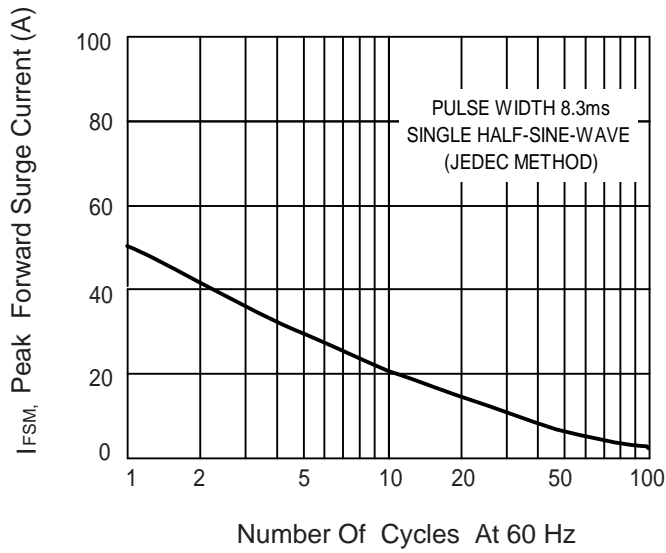
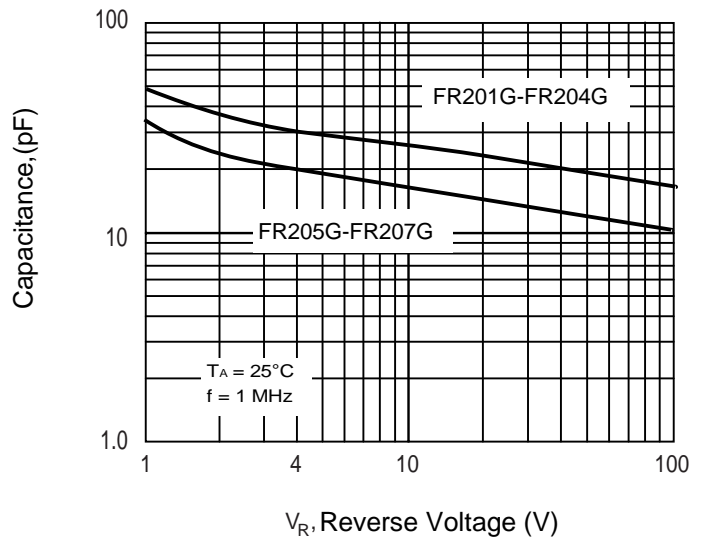


Fig. 4 Typical Junction Capacitance





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