

FR101G THRU FR107G

**FAST RECOVERY
GLASS PASSIVATED RECTIFIER**
VOLTAGE:50 TO 1000V CURRENT:1.0A



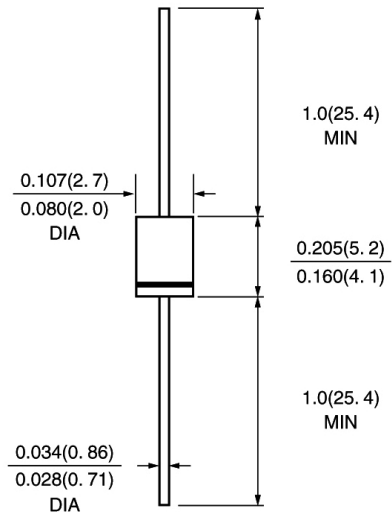
FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
High surge capability
High temperature soldering guaranteed
Fast switching for high efficiency
Glass passivated junction

MECHANICAL DATA

Terminal:Plated axial leads solderable per
MIL-STD 202E, method 208C
Case:Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity:color band denotes cathode
Mounting position:any

DO- 41\DO-204AL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

| | SYMBOL | FR1 01G | FR1 02G | FR1 03G | FR1 04G | FR1 05G | FR1 06G | FR1 07G | units |
|---|---------|--------------|------------|------------|------------|------------|------------|------------|----------|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | Vrms | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking Voltage | Vdc | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta =75°C | If(av) | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 30.0 | | | | | | | A |
| Maximum Forward Voltage at rated Forward Current and 25°C | Vf | 1.3 | | | | | | | V |
| Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C | Ir | 5.0 100.0 | | | | | | | μA μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 150 | | | | 250 | 500 | | nS |
| Typical Junction Capacitance (Note 2) | Cj | 15.0 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | R(ja) | 50.0 | | | | | | | °C/W |
| Storage and Operating Junction Temperature | Tstg,Tj | -50 to +150 | | | | | | | °C |

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
3. Thermal Resistance from Junction to Ambient at 0.375"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES FR101G THRU FR107G

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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

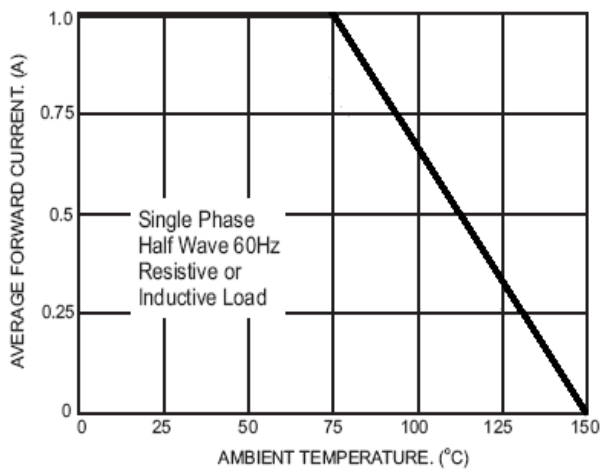


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

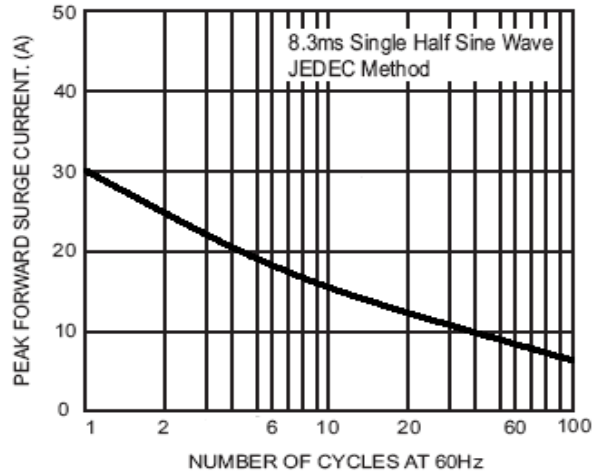


FIG.3- TYPICAL FORWARD CHARACTERISTICS

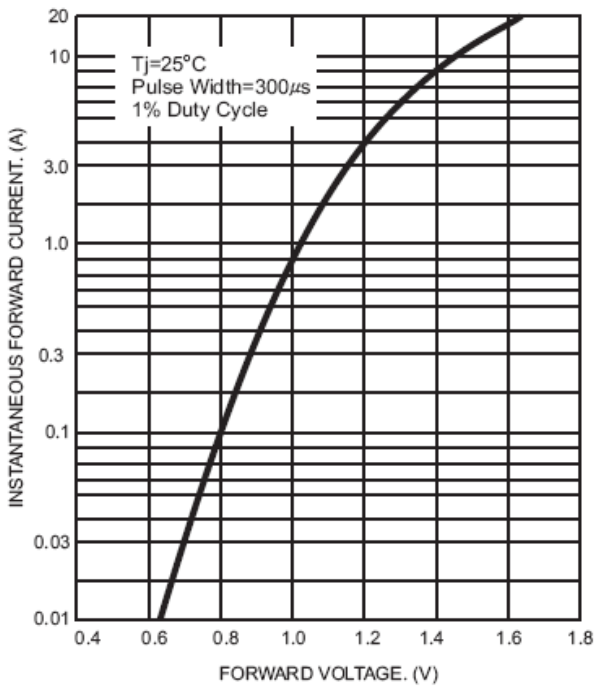


FIG.4- TYPICAL REVERSE CHARACTERISTICS

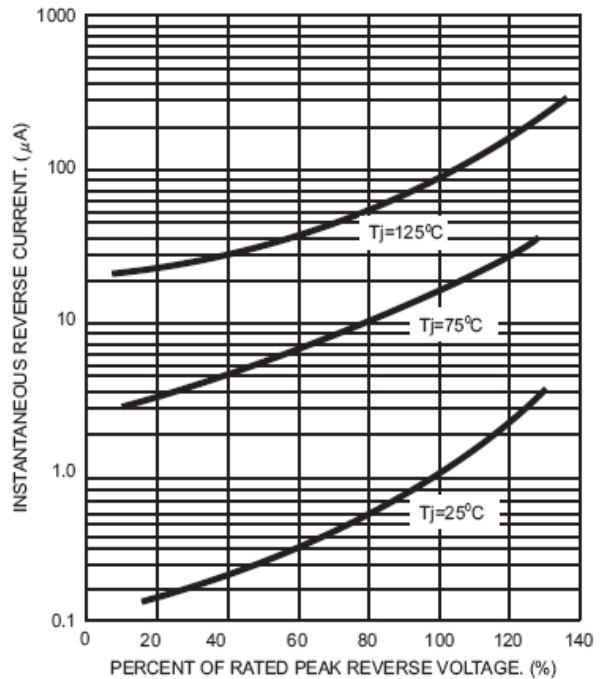


FIG.5- TYPICAL JUNCTION CAPACITANCE

