

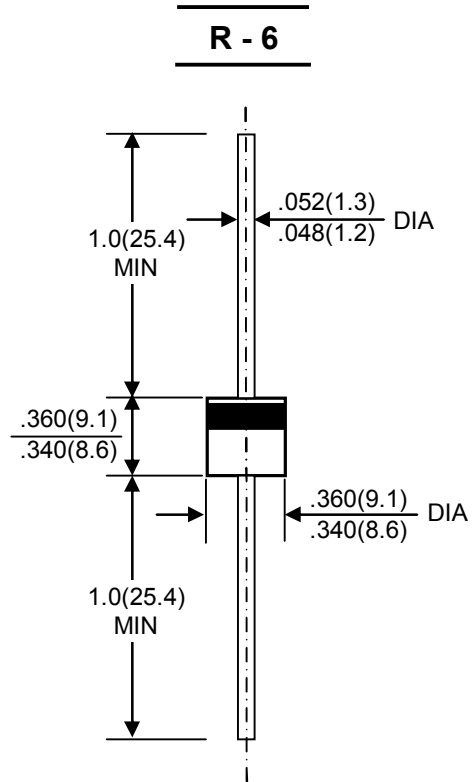
GLASS FAST RECOVERY RECTIFIERS REVERSE VOLTAGE - 50 to 1000 Volts
 FORWARD CURRENT - 6.0 Amperes

FEATURES

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.07 ounces , 2.1 grams
- 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%

| CHARACTERISTICS | SYMBOL | FR601G | FR602G | FR603G | FR604G | FR605G | FR606G | FR607G | UNIT |
|--|--------|-------------|--------|--------|--------|--------|--------|--------|------|
| 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 @TA=75 °C | I(AV) | 6.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | IFSM | 300 | | | | | | | A |
| Peak Forward Voltage at 6.0A DC(Note1) | VF | 1.3 | | | | | | | V |
| Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C | IR | 5.0 100 | | | | | | | µA |
| Maximum Reverse Recovery Time(Note 1) | TRR | 150 | | | | 250 | 500 | | nS |
| Typical Junction Capacitance (Note2) | CJ | 140 | | | | 70 | | | pF |
| Typical Thermal Resistance (Note3) | RθJA | 32 | | | | | | | °C/W |
| Operating Temperature Range | TJ | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | TSTG | -55 to +150 | | | | | | | °C |

NOTES: 1.Measured with IF=0.5A,IR=1A,IRR=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction of ambient.

RATING AND CHARACTERISTIC CURVES
FR601G thru FR607G



FIG. 1 – FORWARD CURRENT DERATING CURVE

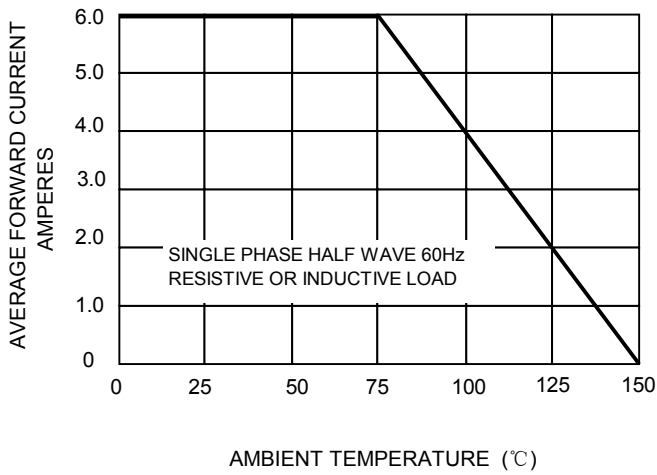


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

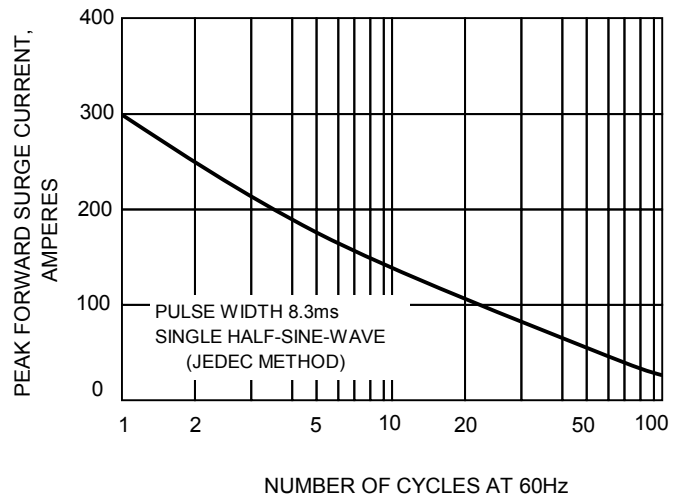


FIG.3 – TYPICAL JUNCTION CAPACITANCE

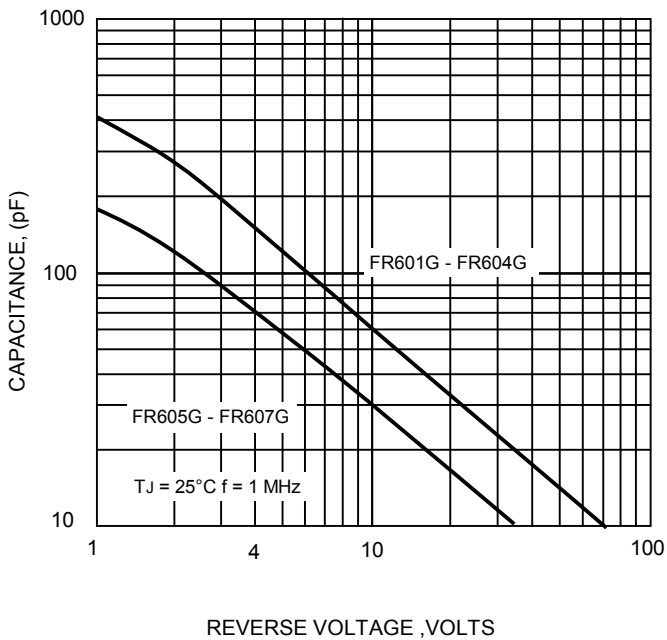


FIG.4-TYPICAL FORWARD CHARACTERISTICS

