

Features

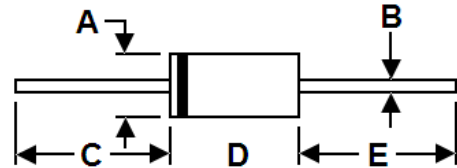
- * Low Forward Voltage Drop
- * High Current Capability
- * High Reliability
- * High Surge Current Capability



RoHS
COMPLIANT

Package Outline Dimensions

DO-15:



| DIM. | Unit (mm) | | Unit (inch) | |
|------|-----------|-----|-------------|-------|
| | Min | Max | Min | Max |
| A | 2.6 | 3.6 | 0.102 | 0.142 |
| B | 0.7 | 0.9 | 0.027 | 0.035 |
| C | 25.4 | - | 1.0 | - |
| D | 5.8 | 7.6 | 0.228 | 0.300 |
| E | 25.4 | - | 1.0 | - |

Mechanical Data

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Type Number | Symbol | FR 201 | FR 202 | FR 203 | FR 204 | FR 205 | FR 206 | FR 207 | Unit |
|---|---------------|---------------------------|--------|--------|--------|--------|--------|--------|-------------|
| Maximum Recurrent 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 D.C Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current .375" (9.5mm)Lead Length @ $T_A=55^{\circ}C$ | $I_{F(AV)}$ | 2.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | I_{FSM} | 60 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 2.0A | V_F | 1.3 | | | | | | | V |
| Maximum D.C Reverse Current @ $T_A=25^{\circ}C$ at Rated D.C Blocking Voltage @ $T_A=100^{\circ}C$ | I_R | 5.0 100 | | | | | | | μA |
| Maximum Reverse Recovery Time(Note1) | T_{rr} | 150 | | | 250 | 500 | | | nS |
| Typical Junction Capacitance(Note2) | C_J | 40 | | | | | | | pF |
| Operating and Storage Temperature Range | T_J/T_{STG} | -55 to +125 / -55 to +150 | | | | | | | $^{\circ}C$ |

Note:1、 Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$. 2、 Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

Ratings and Characteristic Curves

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

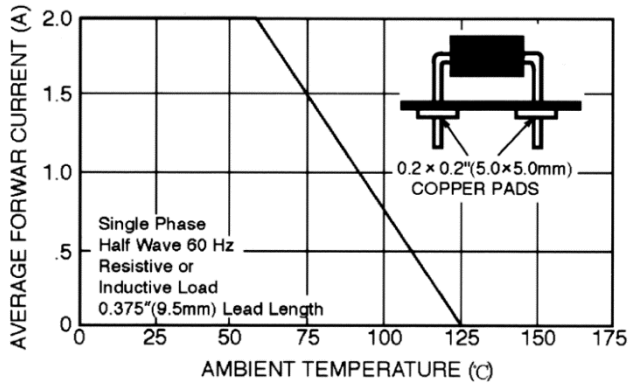


FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

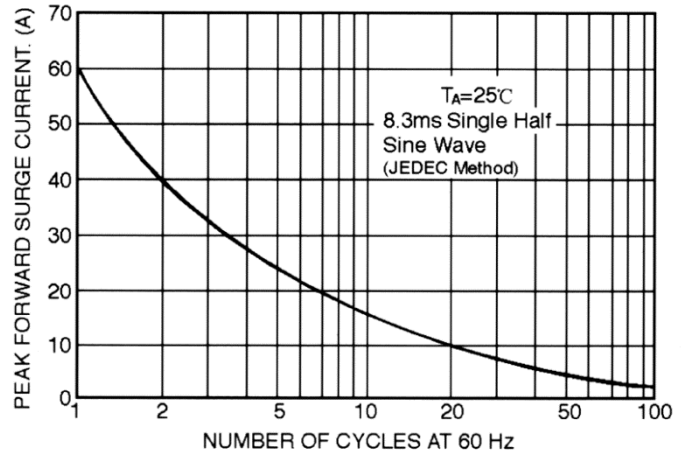


FIG. 3 – TYPICAL FORWARD CHARACTERISTICS

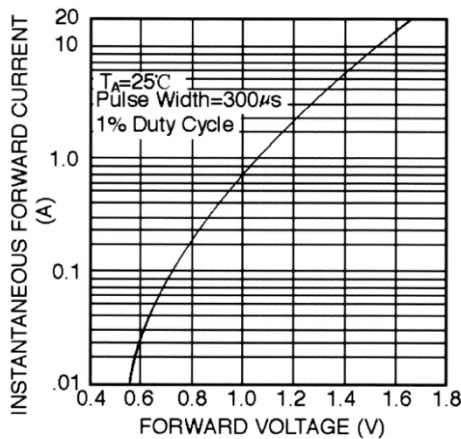


FIG. 4 – TYPICAL JUNCTION CAPACITANCE

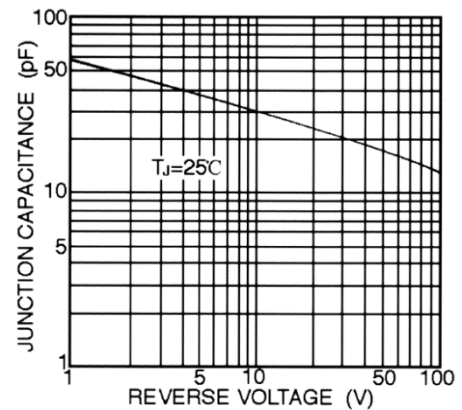
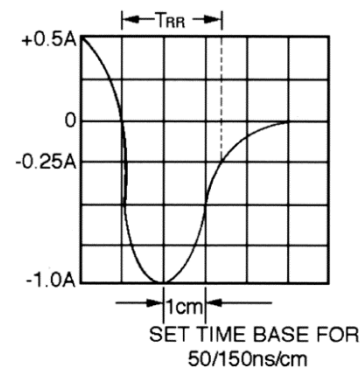
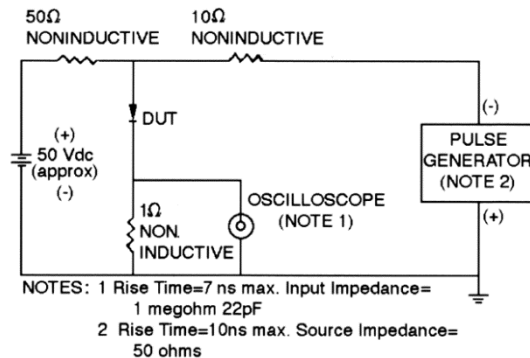


FIG. 5 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS





FR201 THRU FR207
2.0 Amps. Fast Recovery Rectifiers

Ordering Information

| Part No. | Package | Packing |
|-----------------|----------------|-------------------|
| FR201~FR207 | DO-15 | 2K/AMMO box |
| FR201~FR207 | DO-15 | 3K/AMMO box |
| FR201~FR207 | DO-15 | 4K/13" Paper reel |
| FR201~FR207 | DO-15 | 0.5K/Bulk packing |