

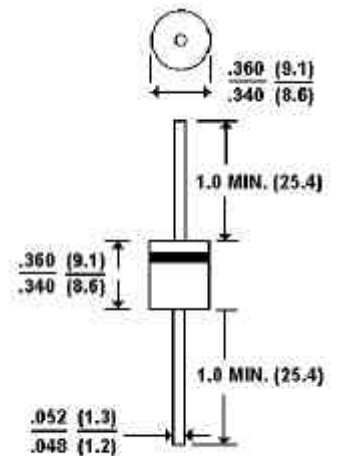
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Void-free Plastic in P600 package
- 6.0 ampere operation at $T_A=55 \text{ }^\circ\text{C}$ with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Ultra fast switching for high efficiency

MECHANICAL DATA

- Case: Molded plastic, P600
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Band denotes cathode
- Mounting Position: Any
- Weight: 0.07 ounce, 2.1 gram

P600



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 $^\circ\text{C}$ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load

| | UF600 | UF601 | UF602 | UF604 | UF606 | UF608 | UNITS |
|--|-------------|-------|-------|-------|-------|-------|--------------------|
| Peak Reverse Voltage, Repetitive ; V_{RM} | 50 | 100 | 200 | 400 | 600 | 800 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | V |
| DC Blocking Voltage; V_R | 50 | 100 | 200 | 400 | 600 | 800 | V |
| Average Forward Current, I_o @ $T_A=55 \text{ }^\circ\text{C}$ 3.8" lead length, 60Hz, resistive or inductive load | 6.0 | | | | | | A |
| Peak Forward Surge Current I_{FM} (surge) 8.3msec. single half sine-wave superimposed on rated load (JEDEC method) | 300 | | | | | | A |
| Maximum Forward Voltage V_F @ 6.0A, 25 $^\circ\text{C}$ J | 1.00 | | 1.10 | | 1.70 | | V |
| Maximum Reverse Current, @ Rated $T_J=25 \text{ }^\circ\text{C}$ J | 10.0 | | | | | | μgA |
| Reverse Voltage $T_J=100 \text{ }^\circ\text{C}$ J | 1000 | | | | | | μgA |
| Typical Junction capacitance (Note 1) C_J | 300 | | | | | | pF |
| Typical Junction Resistance (Note 2) $R_{\theta JKJA}$ | 10.0 | | | | | | $^\circ\text{C/W}$ |
| Reverse Recovery Time $I_F=.5A, I_R=1A, I_{rr}=.25A$ | 50 | 50 | 50 | 50 | 75 | | ns |
| Operating and Storage Temperature Range | -55 TO +150 | | | | | | $^\circ\text{C}$ |

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

UF600 THRU UF608

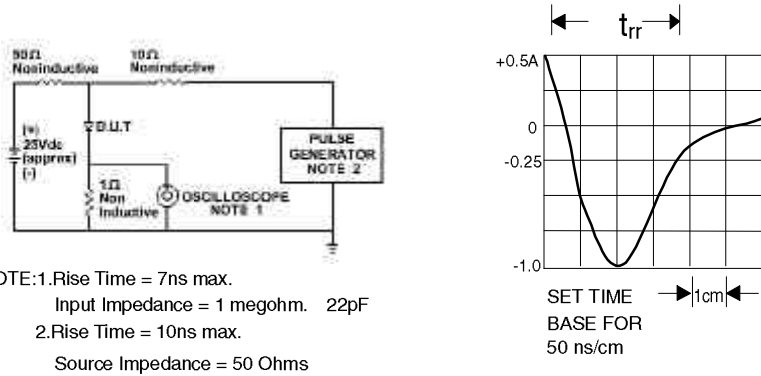


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

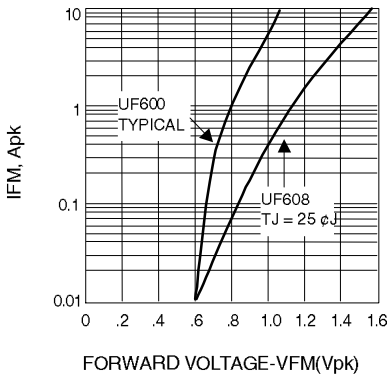


Fig. 2-FORWARD CHARACTERISTICS

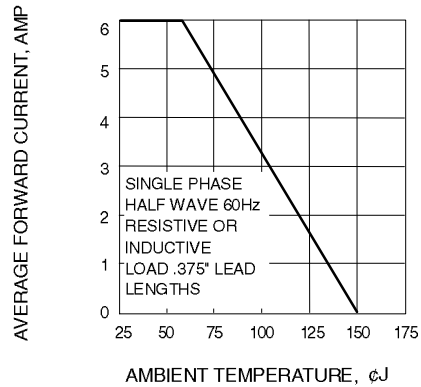


Fig. 3-FORWARD CURRENT DERATING CURVE

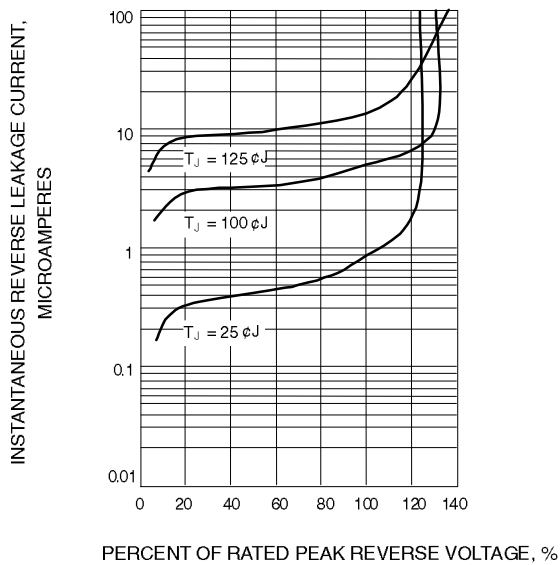


Fig. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

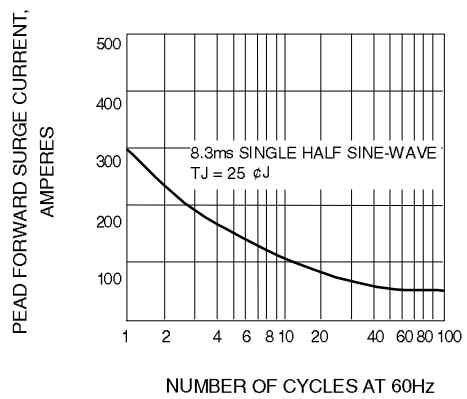


Fig. 5-PEAK FORWARD SURGE CURRENT