



FEATURES

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0 Utilizing
- Flame Retardant Epoxy Molding Compound
- Glass passivated junction in DO-41 package
- 1.0 ampere operation at $T_A=55^\circ\text{C}$ with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Ultra Fast switching for high efficiency

MECHANICAL DATA

Case: Molded plastic, DO-41

Terminals: axial leads, solderable per MIL-STD-202,

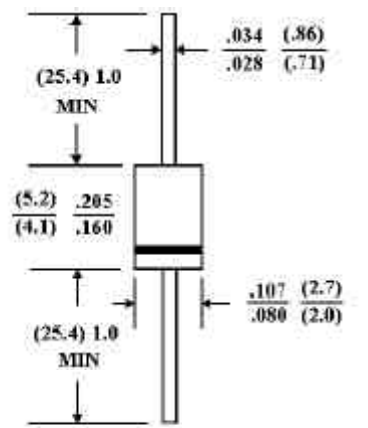
Method 208

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.013 ounce, 0.3 gram

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

| | UF100G | UF101G | UF102G | UF104G | UF106G | UF108G | 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 Reverse Voltage; V_R | 50 | 100 | 200 | 400 | 600 | 800 | V |
| Average Forward Current, I_o @ $T_A=55^\circ\text{C}$ 3/8" lead length, 60 Hz, resistive or inductive load | 1.0 | | | | | | A |
| Peak Forward Surge Current, I_{FM} (surge) 8.3msec. single half sine wave superimposed on rated load (JECEC method) | 30 | | | | | | A |
| Maximum Forward Voltage V_F @ 1.0A, 25°C | 1.00 | | 1.30 | | 1.70 | | V |
| Maximum Reverse Current, @ Rated $T_J=25^\circ\text{C}$ | 10.0 | | | | | | μgA |
| Reverse Voltage $T_J=100^\circ\text{C}$ | 150 | | | | | | μgA |
| Typical Junction capacitance (Note 1) C_J | 17 | | | | | | pF |
| Typical Junction Resistance (Note 2) $R_{\theta JKJA}$ | 60 | | | | | | $^\circ\text{C/W}$ |
| Reverse Recovery Time $I_F=.5A, I_R=1A, I_{rr}=.25A$ | 50 | 50 | 50 | 50 | 100 | 100 | 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 at 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES
 UF100G THRU UF108G

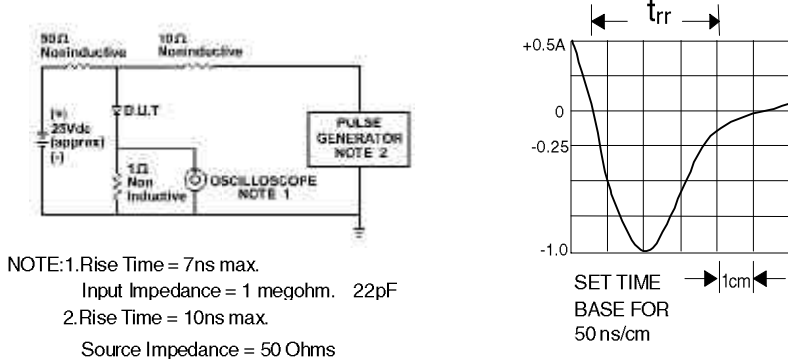


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

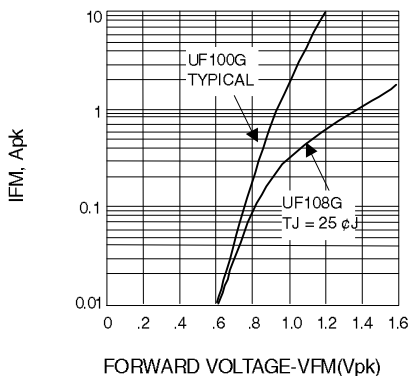


Fig. 2-FORWARD CHARACTERISTICS

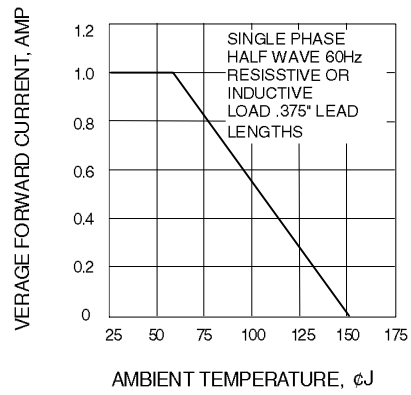


Fig. 3-FORWARD CURRENT DERATING CURVE

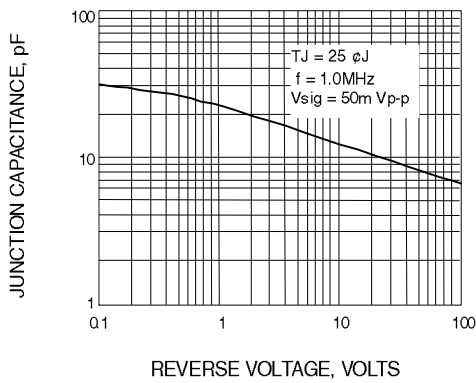


Fig. 4-TYPICAL JUNCTION CAPACITANCE

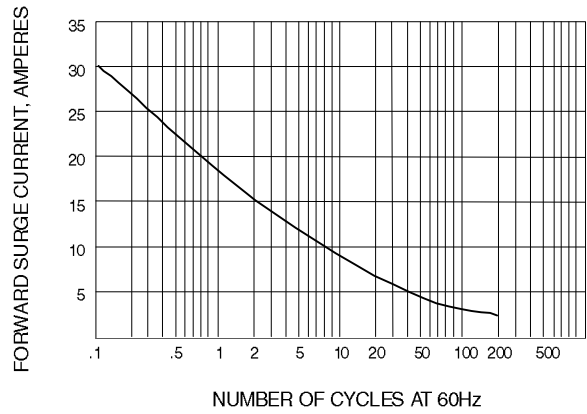


Fig. 5-PEAK FORWARD SURGE CURRENT