



UF200G THRU UF208G

GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 2.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction in DO-15 package
- 2.0 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, DO-15

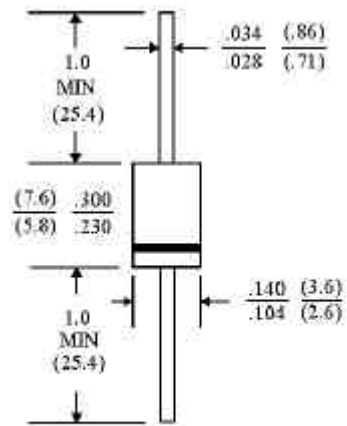
Terminals: axial leads, solderable per MIL-STD-202, Method 208

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram

DO-15



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.

| | UF200G | UF201G | UF202G | UF204G | UF206G | UF208G | 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 @ $T_A=55\text{ }^\circ\text{C}$ 3/8" lead length, 60 Hz, resistive or inductive load | 2.0 | | | | | | A |
| Peak Forward Surge Current, I_{FM} (surge) 8.3msec. single half sine wave superimposed on rated load(JECEC method) | 60 | | | | | | A |
| Maximum Forward Voltage V_F @ 2.0A, 25 $^\circ\text{C}$ | 1.00 | | 1.30 | | 1.70 | | V |
| Maximum Reverse Current, @ Rated $T_J=25\text{ }^\circ\text{C}$ | 10.0 | | | | | | μgA |
| Reverse Voltage $T_J=100\text{ }^\circ\text{C}$ | 200 | | | | | | μgA |
| Typical Junction capacitance (Note 1) C_J | 35 | | | | | | pF |
| Typical Junction Resistance (Note 2) $R_{\theta KJA}$ | 45 | | | | | | $^\circ\text{C/W}$ |
| 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:

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

RATING AND CHARACTERISTIC CURVES

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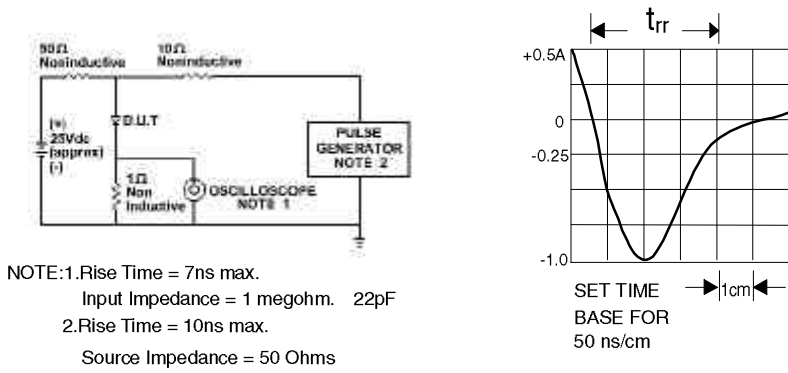


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

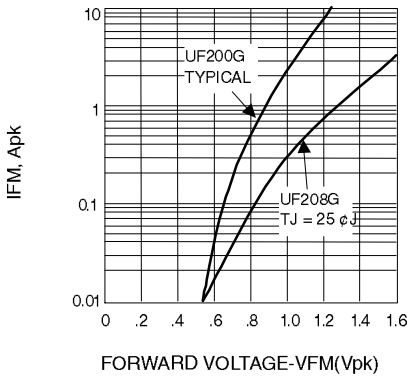


Fig. 2-FORWARD CHARACTERISTICS

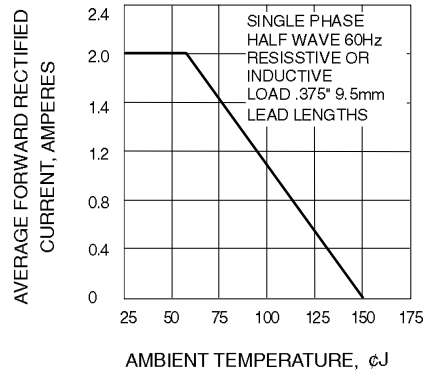


Fig. 3-FORWARD CURRENT DERATING CURVE

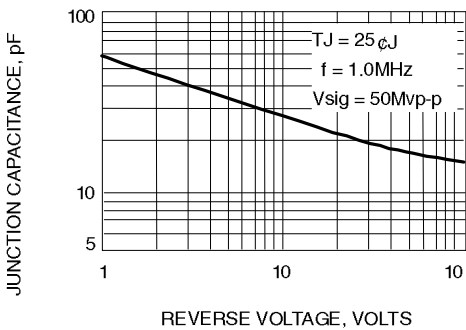


Fig. 4-TYPICAL JUNCTION CAPACITANCE

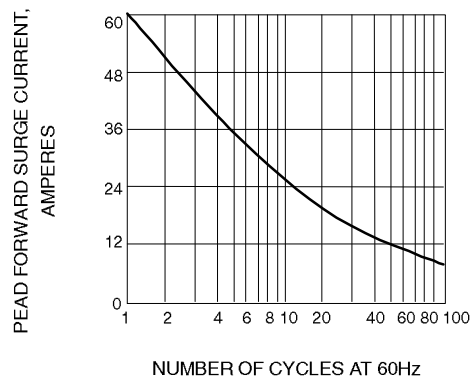


Fig. 5-PEAK FORWARD SURGE CURRENT