UF600 THRU UF608

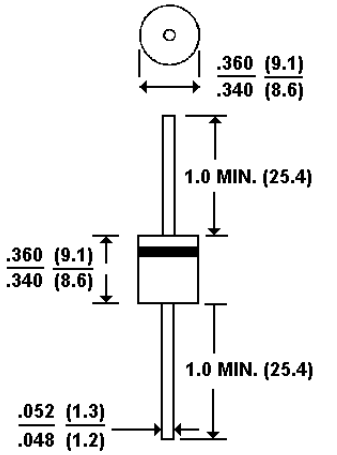
ULTRAFAST SWITCHING RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 6.0 Amperes

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 ¢J with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Ultra fast switching for high efficiency

P600



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

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

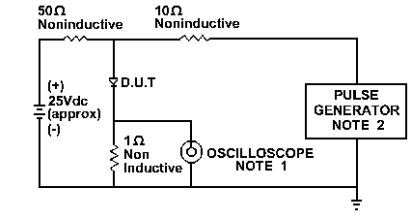
	UF600	UF601	UF602	UF604	UF606	UF608	UNITS
Peak Reverse Voltage, Pepetitive ; V_{RM}	50	100	200	400	600	800	V
Maximum RMS Voltage	35	70	140	280	420	560	V
DC Blocking Voltage; VR	50	100	200	400	600	800	V
Average Forward Current, Io @T_A=55 ¢J 3.8" lead length, 60Hz, resistive or inductive load	6.0						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 ¢J	1.00			1.10	1.70		V
Maximum Reverse Current, @ Rated T_J=25 ¢J	10.0						£g A
Reverse Voltage T_J=100 ¢J	1000						£g A
Typical Junction capacitance (Note 1) CJ	300						pF
Typical Junction Resistance (Note 2) R£KJA	10.0						¢J/W
Reverse Recovery Time I_F=.5A, I_R=1A, Irr=.25A	50	50	50	50	75		ns
Operating and Storage Temperature Range	-55 TO +150						¢J

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



NOTE:1.Rise Time = 7ns max.
Input Impedance = 1 megohm. 22pF
2.Rise Time = 10ns max.
Source Impedance = 50 Ohms

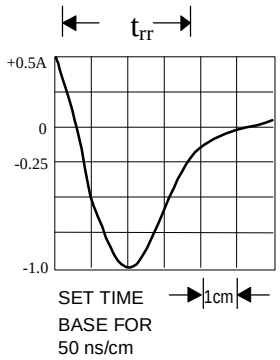


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

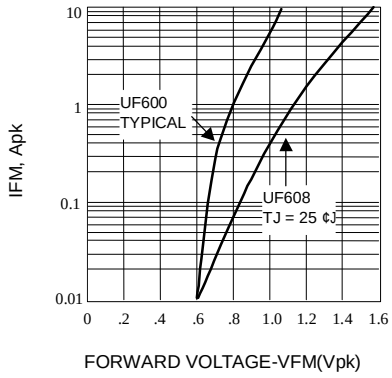


Fig. 2-FORWARD CHARACTERISTICS

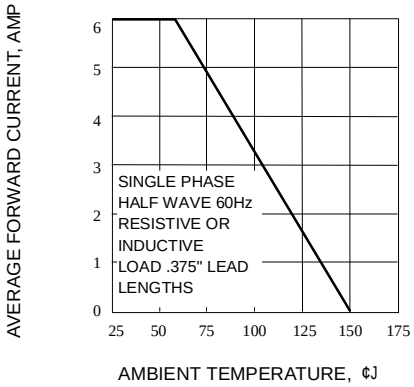


Fig. 3-FORWARD CURRENT DERATING CURVE

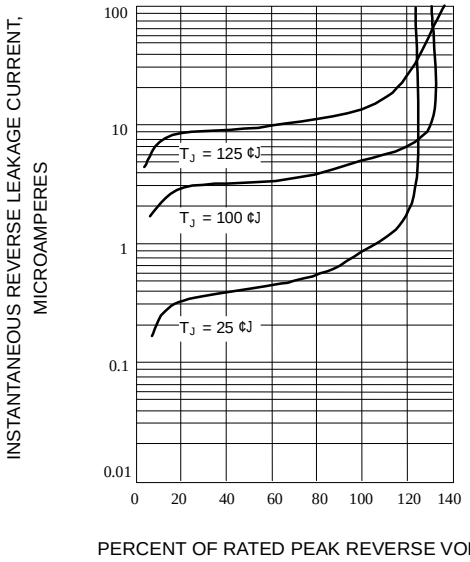


Fig. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

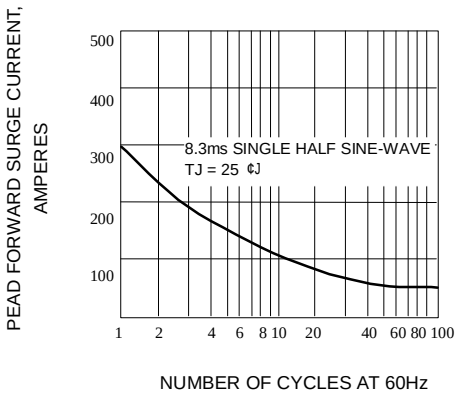


Fig. 5-PEAK FORWARD SURGE CURRENT