

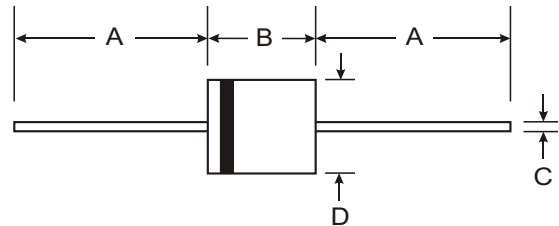
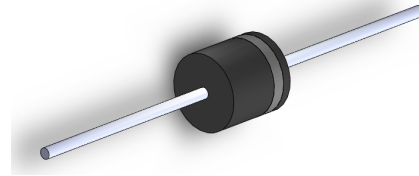
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 6.0 A**

### Features

- High Surge Current Capability
- Low Leakage and Forward Voltage Drop
- Plastic Material - UL Flammability
- Classification 94V-0
- Low Power Loss, High Efficiency

### Mechanical Data

- Case: R-6 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
D	8.6	9.1
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	UF600	UF601	UF602	UF603	UF604	UF606	UF607	UF608	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V	
Working Peak Reverse Voltage	V <sub>RWM</sub>										
DC Blocking Voltage	V <sub>R</sub>										
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	210	280	420	560	700	V	
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 55°C	I <sub>O</sub>	6.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	200								A	
Forward Voltage @I <sub>F</sub> = 6.0A	V <sub>FM</sub>	1.0			1.3		1.7			V	
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	10.0				100					µA
Reverse Recovery Time (Note 2)	t <sub>rr</sub>	50				75					nS
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	100				65					pF
Operating Temperature Range	T <sub>j</sub>	-65 to +125								°C	
Storage Temperature Range	T <sub>STG</sub>	-65 to +150								°C	

- Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
 2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A. See figure 5.  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

### RATING AND CHARACTERISTIC CURVES UF600 THRU UF608

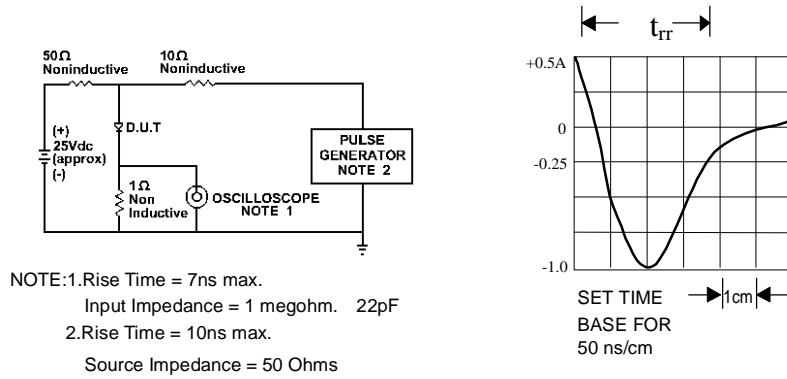


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

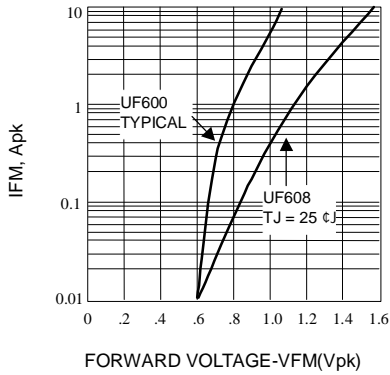


Fig. 2-FORWARD CHARACTERISTICS

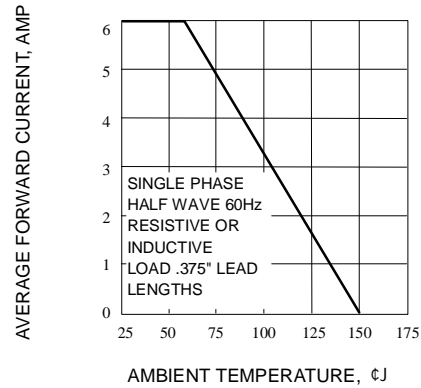


Fig. 3-FORWARD CURRENT DERATING CURVE

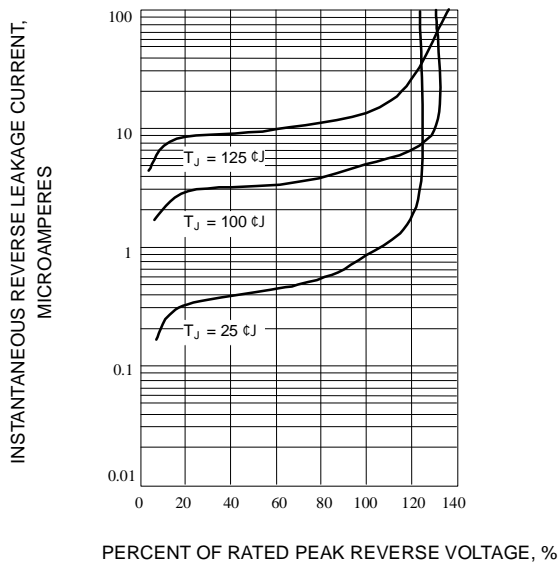


Fig. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

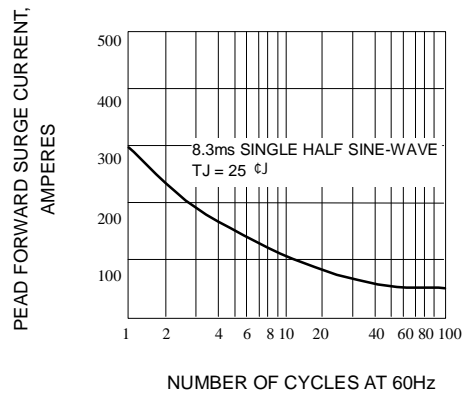


Fig. 5-PEAK FORWARD SURGE CURRENT