

UF600 - UF608

ULTRA FAST RECOVERY RECTIFIER DIODES

VOLTAGE RANGE: 50-1000V CURRENT: 6.0 A

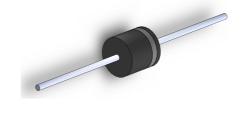
Features

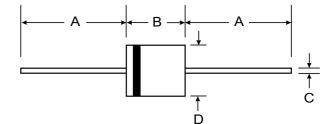
- High Surge Current Capability
- Low Leakage and Forward Voltage Drop
- Plastic Material UL Flammability
- Classification 94V-0
- Low Power Loss, High Efficiency

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					
Α	25.4	_					
В	8.6	9.1					
С	1.2	1.3					
All Dimensions in mm							

Maximum Ratings and Electrical Characteristics T_A = 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 Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	300	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	210	280	420	560	700	V
Average Rectified Output Current (Note 1) $@T_A = 55^{\circ}C$	lo	6.0							А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	200							A	
Forward Voltage $@I_F = 6.0A$	Vfm	1.0 1.3 1.7						V		
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	Irm	10.0 100							μA	
Reverse Recovery Time (Note 2)	trr	50 75						nS		
Typical Junction Capacitance (Note 3)	Cj	100 65					pF			
Operating Temperature Range	Tj	-65 to +125							°C	
Storage Temperature Range	Тѕтс	-65 to +150						°C		

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured with IF = 0.5A, IR = 1.0A, IRR = 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

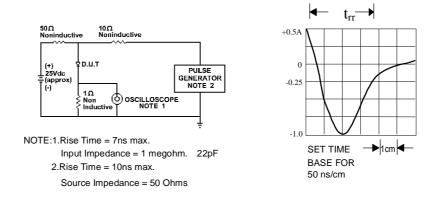


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

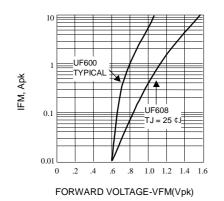
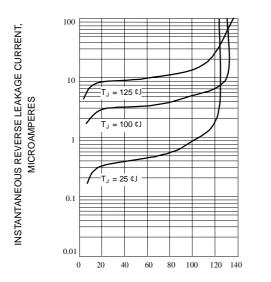
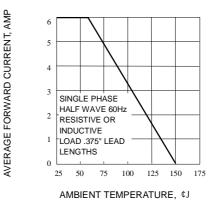


Fig. 2-FORWARD CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE, %

Fig. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





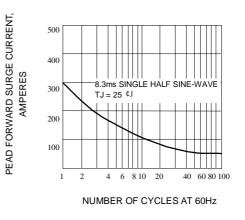


Fig. 5-PEAK FORWARD SURGE CURRENT