### UF600G THRU UF608G

# GLASS PASSIVATED JUNCTION 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
- Glass passivated junction in P600 package
- 6.0 ampere operation at T<sub>A</sub>=55 ¢J with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Ultra Fast switching for high efficiency

#### **MECHANICAL DATA**

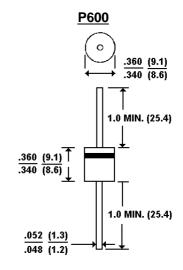
Case: Molded plastic, P600

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

Method 208

Polarity: Band denotes cathode

Mounting Position: Any Weight: 0.07 ounce, 2.1 gram



**Dimensions in inches and (millimeters)** 

#### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 ¢J ambient temperature unless otherwise specified.

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

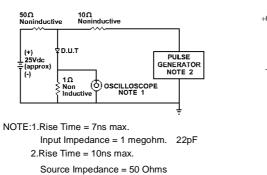
	UF600G	UF601G	UF602G	UF604G	UF606G	UF608G	UNITS
Peak Reverse Voltage, Repetitive; V <sub>RM</sub> :	50	100	200	400	600	800	V
Maximum RMS Voltage	35	70	140	280	420	560	V
DC Reverse Voltage; V <sub>R</sub>	50	100	200	400	600	800	V
Average Forward Current, lo @ T <sub>A</sub> =55 ¢J 3/8" lead	6.0						Α
length, 60 Hz, resistive or inductive load							
Peak Forward Surge Current, I <sub>FM</sub> (surge) 8.3msec.	250						Α
single half sine wave superimposed on rated							
load(JECEC method)							
Maximum Forward Voltage VF @ 6.0A, 25 ¢J		1.00		1.30	1.	70	V
Maximum Reverse Current, @ Rated T <sub>J</sub> =25 ¢J	10.0						£g A
Reverse Voltage T <sub>J</sub> =100 ¢J	500						£g A
Typical Junction capacitance (Note 1) CJ	300						₽F
Typical Junction Resistance (Note 2) R £KJA	10.0						¢J/W
Reverse Recovery Time	50	50	50	50	100	100	ns
$I_F$ =.5A, $I_R$ =1A, $I_{rr}$ =.25A							
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 UF600G THRU UF608G

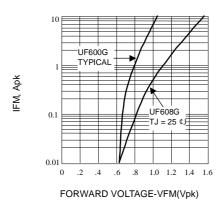


+0.5A

0
-0.25

SET TIME
BASE FOR
50 ns/cm

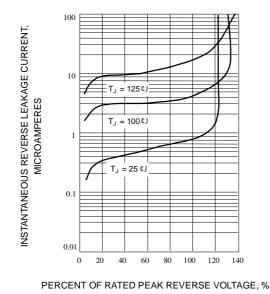
Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



| CAMPANDO ON THE PRINCIPLE |

Fig. 2-FORWARD CHARACTERISTICS





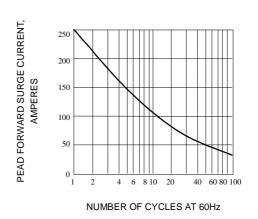


Fig. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Fig. 5-PEAK FORWARD SURGE CURRENT

