



DATA SHEET

UF600G~UF608G

GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIERS

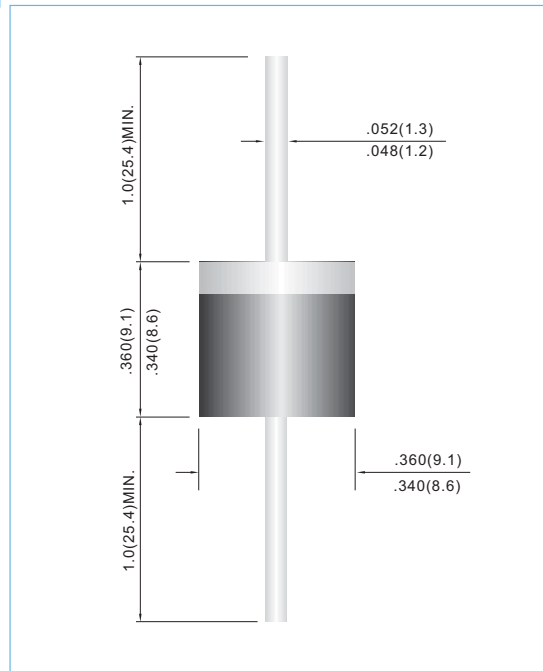
VOLTAGE 50 to 800 Volts **CURRENT** 6.0 Amperes **P-600** Unit: inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- Ultra Fast switching for high efficiency.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: Molded plastic, P-600
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°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	UF600G	UF601G	UF602G	UF604G	UF606G	UF608G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current .375" (9.5mm) lead length at $T_A=55^\circ C$	I_A	6.0						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250						A
Maximum Forward Voltage at 6.0A	V_F	1.0		1.3		1.7		V
Maximum DC Reverse Current $T_J=25^\circ C$ at Rated DC Blocking Voltage $T_J=100^\circ C$	I_R	10.0 500						μA
Typical Junction capacitance (Note 1)	C_J	300						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	10						$^\circ C / W$
Maximum Reverse Recovery Time (Note 3)	T_{RR}	50				100		ns
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 TO +150						$^\circ C$

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.
3. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$



RATING AND CHARACTERISTIC CURVES

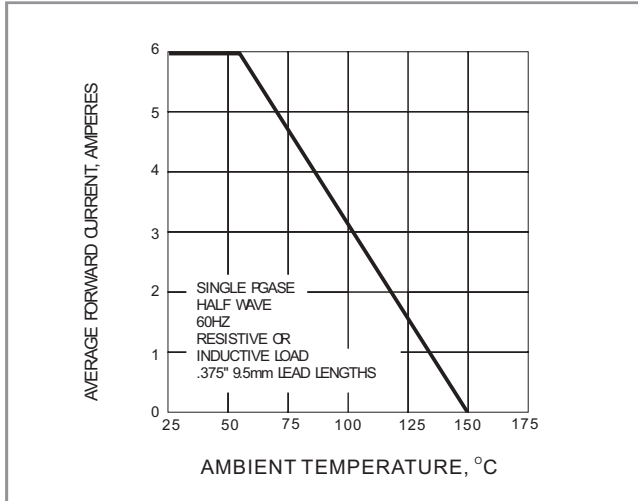


Fig.1 FORWARD CURRENT DERATING CURVE

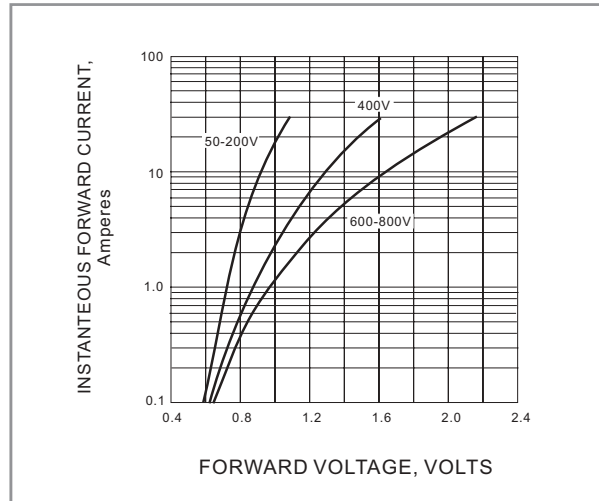


Fig.2 FORWARD CHARACTERISTICS

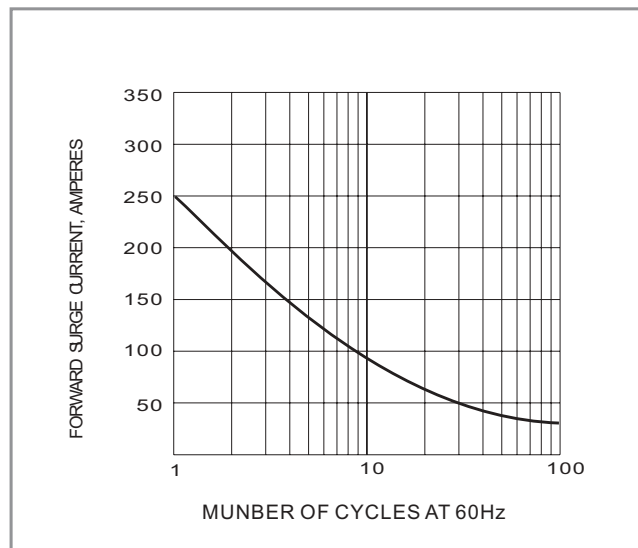


Fig.3 PEAK FORWARD SURGE CURRENT

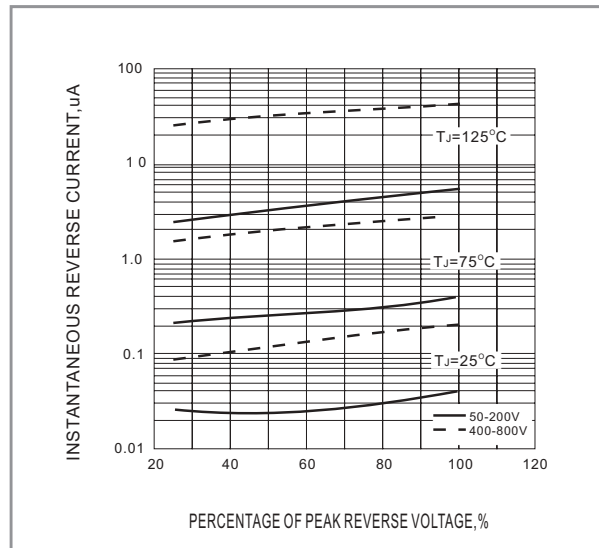


Fig.4 TYPICAL REVERSE CHARACTERISTICS