



UF100GS THRU UF108GS

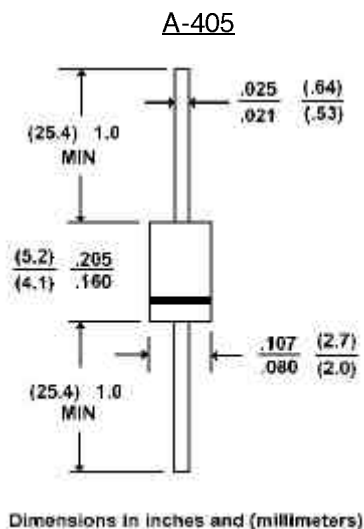
GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIER
 VOLTAGE - 50 to 800 Volts CURRENT - 1.0 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction in A-405 package
- 1.0 ampere operation at $T_A=55^\circ\text{C}$ with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Ultra Fast switching for high efficiency

MECHANICAL DATA

- Case: Molded plastic, A-405
- Terminals: axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Band denotes cathode
- Mounting Position: Any
- Weight: 0.008 ounce, 0.22 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.

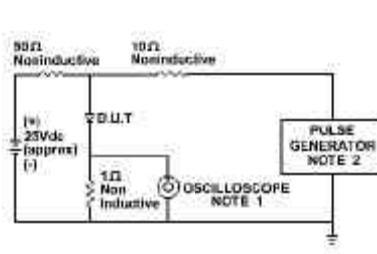
	UF100GS	UF101GS	UF102GS	UF104GS	UF106GS	UF108GS	UNITS
Peak Reverse Voltage, Repetitive; V_{RM} :	50	100	200	400	600	800	V
Maximum RMS Voltage	35	70	140	280	420	560	V
DC Reverse Voltage; V_R	50	100	200	400	600	800	V
Average Forward Current, I_o @ $T_A=55^\circ\text{C}$ 3/8" lead length, 60 Hz, resistive or inductive load	1.0						A
Peak Forward Surge Current, I_{FM} (surge) 8.3msec. single half sine wave superimposed on rated load(JEDEC method)	30						A
Maximum Forward Voltage V_F @ 1.0A, 25°C	1.00		1.30		1.70		V
Maximum Reverse Current, @ Rated $T_J=25^\circ\text{C}$	10.0						μgA
Reverse Voltage $T_J=100^\circ\text{C}$	150						μgA
Typical Junction capacitance (Note 1)	17						pF
Typical Junction Resistance (Note 2) $R_{\theta\text{KJA}}$	60.0						$^\circ\text{C/W}$
Reverse Recovery Time $I_F=.5\text{A}$, $I_R=1\text{A}$, $I_T=.25\text{A}$	50	50	50	50	100	100	ns
Operating and Storage Temperature Range	-55 to +150						$^\circ\text{C}$

NOTES:

- Measured at 1 MHz and applied reverse voltage of 4.0 VDC
- Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

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

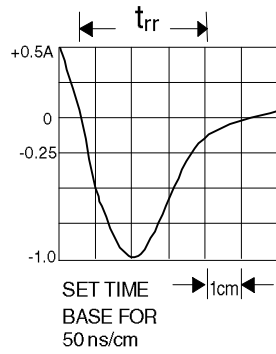


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

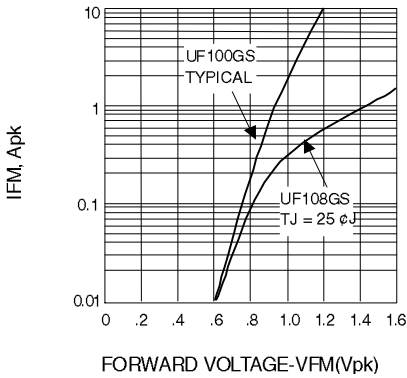


Fig. 2-FORWARD CHARACTERISTICS

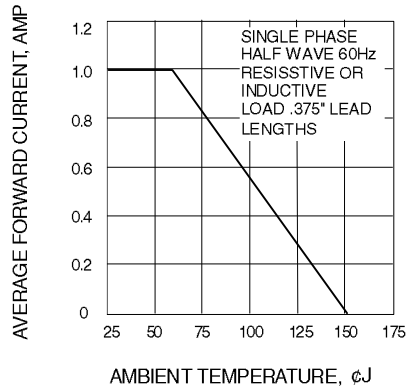


Fig. 3-FORWARD CURRENT DERATING CURVE

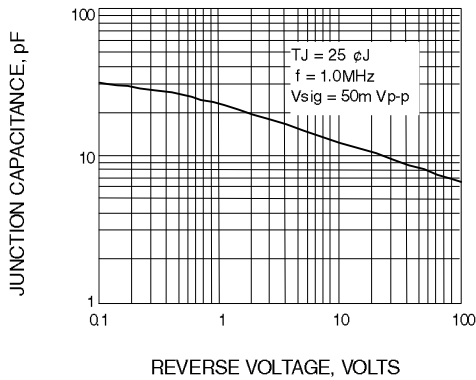


Fig. 4-TYPICAL JUNCTION CAPACITANCE

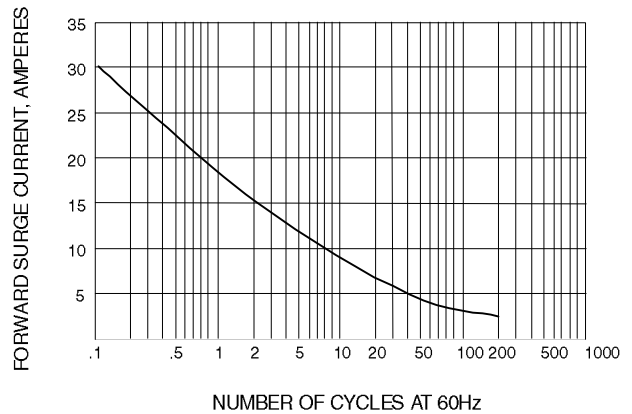


Fig. 5-PEAK FORWARD SURGE CURRENT