TRANSYS ELECTRONICS LIMITED

UF100G THRU UF108G

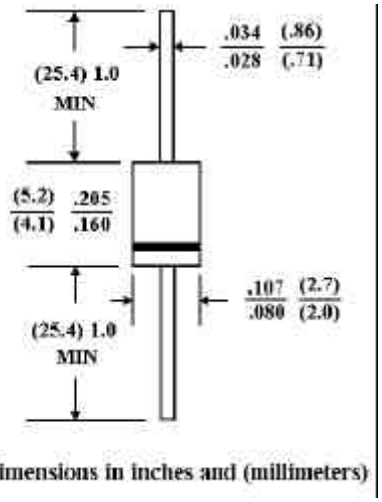
GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 1.0 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammab ity Classification 94V-O Ut izing
- Flame Retardant Epoxy Molding Compound
- Glass passivated junction in DO-41 package
- 1.0 ampere operation at T_A=55 ¢J with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Ultra Fast switching for high efficiency

DO-41



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-41

Terminals: axial leads, solderable per MIL-STD-202, Method 208

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.013 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

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

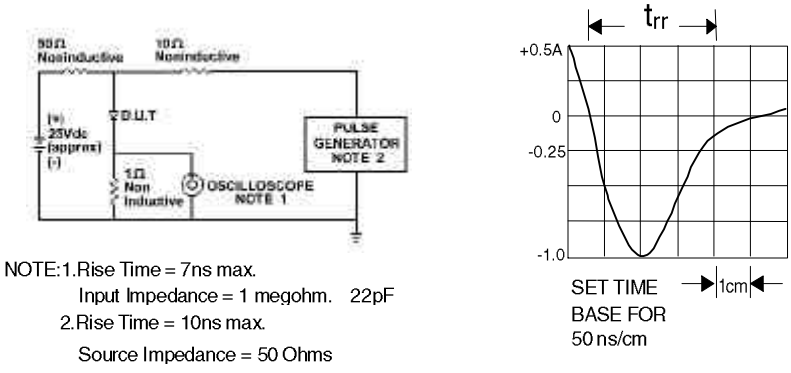
	UF100G	UF101G	UF102G	UF104G	UF106G	UF108G	UNITS
Peak Reverse Voltage, Repetitive; V_{RM}:	50	100	200	400	600	800	V
Maximum RMS Voltage	35	70	140	280	420	560	V
DC Reverse Voltage; V_R	50	100	200	400	600	800	V
Average Forward Current, Io @ T_A=55 ¢J 3/8" lead length, 60 Hz, resistive or inductive load	1.0						A
Peak Forward Surge Current, I_{FM} (surge) 8.3msec. single half sine wave superimposed on rated load(JECEC method)	30						A
Maximum Forward Voltage VF @ 1.0A, 25 ¢J	1.00			1.30	1.70		V
Maximum Reverse Current, @ Rated T_J=25 ¢J	10.0						£gA
Reverse Voltage T_J=100 ¢J	150						£gA
Typical Junction capacitance (Note 1) CJ	17						pF
Typical Junction Resistance (Note 2) R £KJA	60						¢J/W
Reverse Recovery Time I_F=.5A, I_R=1A, I_{rr}=.25A	50	50	50	50	100	100	ns
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 at 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

UF100G THRU UF108G



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

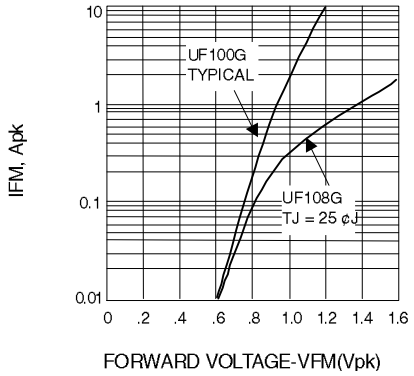


Fig. 2-FORWARD CHARACTERISTICS

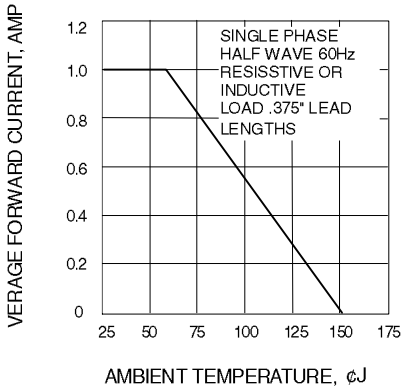


Fig. 3-FORWARD CURRENT DERATING CURVE

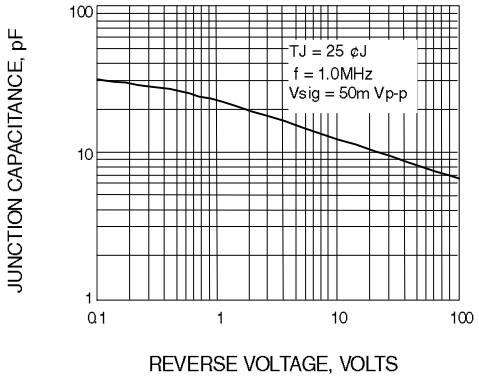


Fig. 4-TYPICAL JUNCTION CAPACITANCE

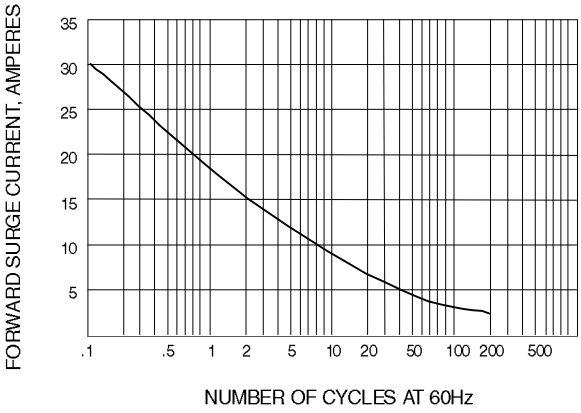


Fig. 5-PEAK FORWARD SURGE CURRENT