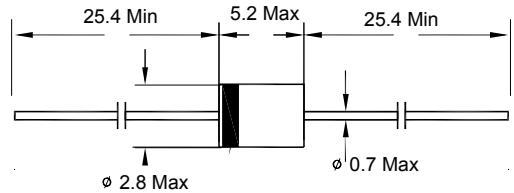


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Void-free Plastic in DO-41 package
- 1.0 ampere operation at $T_A=55\text{ }^{\circ}\text{C}$ with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Ultra fast switching for high efficiency

UF100 THRU UF1010



DO-41 Dimensions in 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 °C ambient temperature unless otherwise specified.

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

CHARACTERISTICS	SYMBOL	UF100	UF101	UF102	UF104	UF106	UF108	UF1010	UNITS
Maximum Recurrent Peak Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Voltage		35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_L=75^{\circ}\text{C}$		1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)		30.0							A
Maximum forward Voltage at 1.0A DC	VF	1.00		1.30	1.50	1.70		V	
Maximum DC Reverse Current @ $T_J=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_J=100^{\circ}\text{C}$	IR	5							μA
		100							μA
Maximum Reverse Recovery Time (Note 1)	CJ	17.0							pF
Typical Junction Resistance(Note 2)R JA	R θ JL	60.0							$^{\circ}\text{C/W}$
Reverse Recovery Time $I_F=.5\text{A}, I_R=1\text{A}, I_{RR}=.25\text{A}$	TRR	50				75			ns
Operating and Storage Temperature Range	TSTG	-55 to +150							$^{\circ}\text{C}$

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

UF100 THRU UF1010

Typical Characteristics

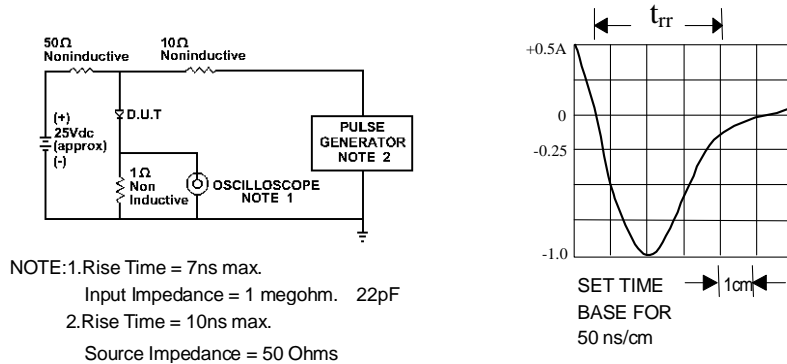


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

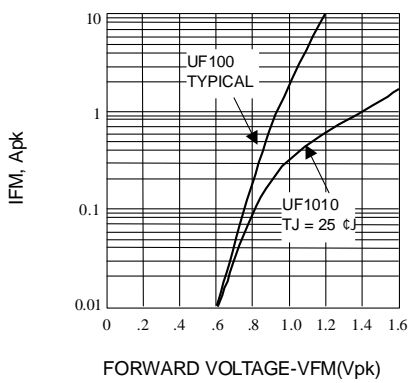


Fig. 2-FORWARD CHARACTERISTICS

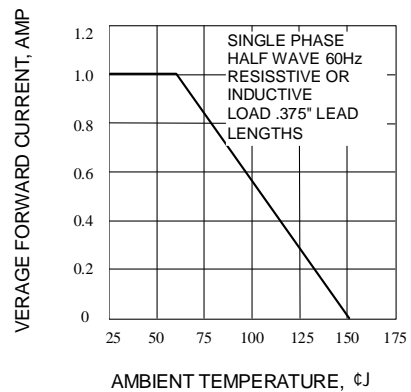


Fig. 3-FORWARD CURRENT DERATING CURVE

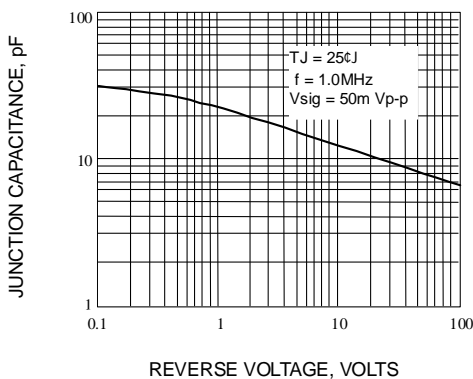


Fig. 4-TYPICAL JUNCTION CAPACITANCE

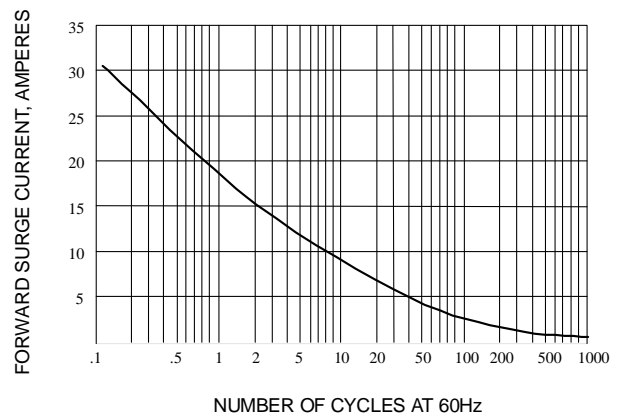


Fig. 5-PEAK FORWARD SURGE CURRENT