

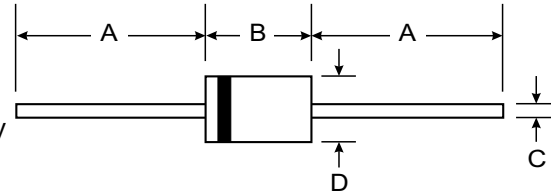


UF200-UF2010

2.0A Axial Leaded Ultrfast Switching Fast Rectifier

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Void-free Plastic in DO-15 package
- 2.0 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, DO-15
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Band denotes cathode
- Mounting Position: Any
- Weight: 0.015 ounce, 0.4 gram

DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^{\circ}\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

	UF200	UF201	UF202	UF204	UF206	UF208	UF2010	UNITS
Peak Reverse Voltage, Pepetitive ; V_{RM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
DC Blocking Voltage; VR	50	100	200	400	600	800	1000	V
Average Forward Current, I_o @ $T_A=55^{\circ}\text{C}$ 3.8" lead length, 60Hz, resistive or inductive load	2.0							A
Peak Forward Surge Current I_{FM} (surge) 8.3msec. single half sine-wave superimposed on rated load (JEDEC method)	60							A
Maximum Forward Voltage V_F @ 2.0A, 25 $^{\circ}\text{C}$	1.00			1.10	1.70			V
Maximum Reverse Current, @ Rated $T_J=25^{\circ}\text{C}$	10.0							Eg A
Reverse Voltage $T_J=100^{\circ}\text{C}$	500							Eg A
Typical Junction capacitance (Note 1) C_J	35							μF
Typical Junction Resistance (Note 2) $R \text{ E K J A}$	45							$^{\circ}\text{C/W}$
Reverse Recovery Time $I_F=.5A, I_R=1A, I_{rr}=.25A$	50	50	50	50	75	75	75	ns
Operating and Storage Temperature Range	-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

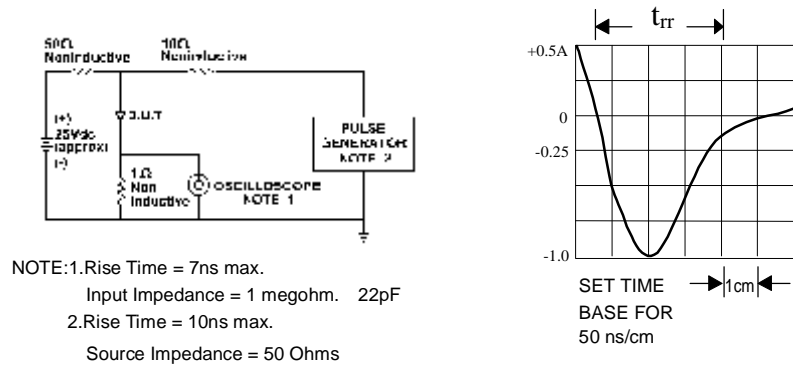


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

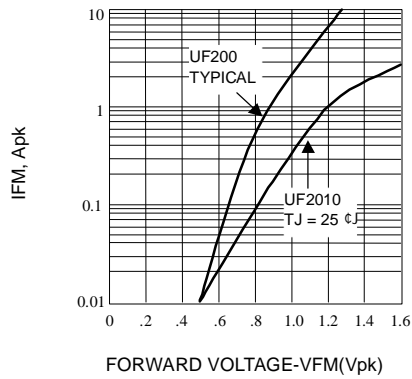


Fig. 2-FORWARD CHARACTERISTICS

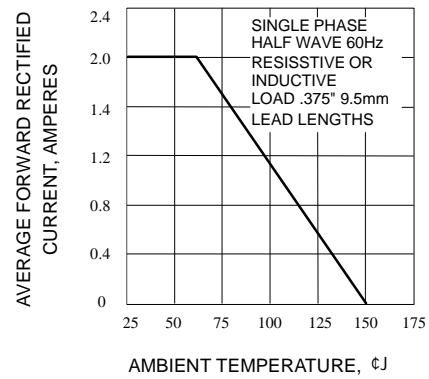


Fig. 3-FORWARD CURRENT DERATING CURVE

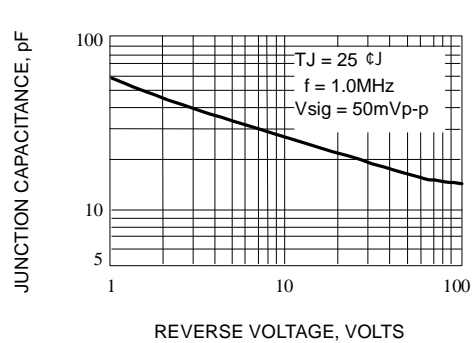


Fig. 4-TYPICAL JUNCTION CAPACITANCE

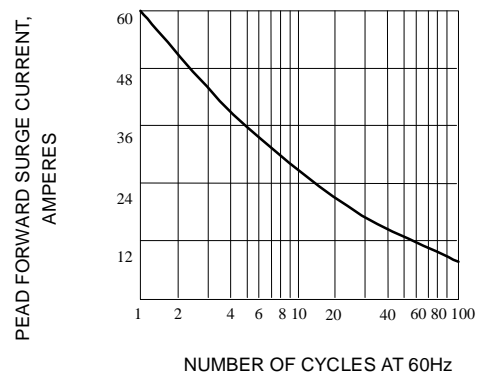


Fig. 5-PEAK FORWARD SURGE CURRENT