

## UF2004A

### ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 400V

CURRENT: 2.0A



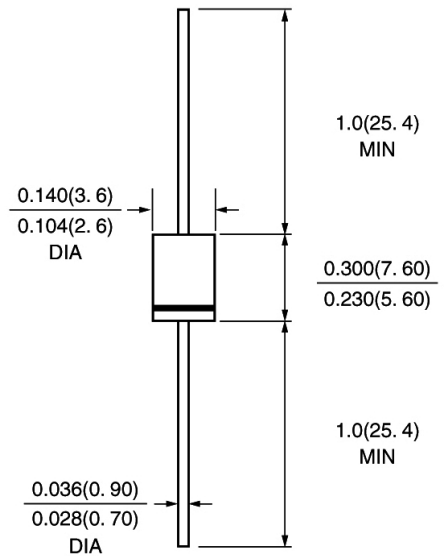
#### FEATURE

Low power loss  
High surge capability  
Glass passivated chip junction  
Ultra-fast recovery time for high efficiency  
High temperature soldering guaranteed  
250°C/10sec/0.375" lead length at 5 lbs tension

#### MECHANICAL DATA

Terminal: Plated axial leads solderable per  
MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame  
Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any

#### DO-15/DO-204AC



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

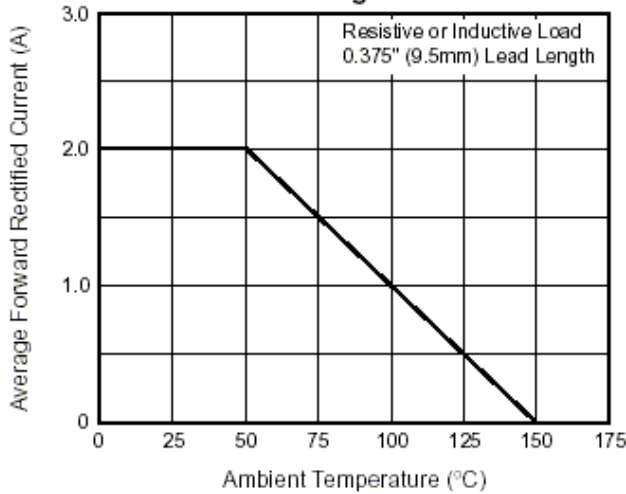
(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	UF2004A	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	400	V
Maximum RMS Voltage	V <sub>rms</sub>	280	V
Maximum DC blocking Voltage	V <sub>dc</sub>	400	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =50°C	I <sub>f(av)</sub>	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	75.0	A
Maximum Forward Voltage at Forward current 2.0A Peak	V <sub>f</sub>	1.25	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	5.0 100.0	μ A μ A
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	50	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	70	pF
Typical Thermal Resistance (Note 3)	R(ja)	40.0	°C/W
Storage and Operating Junction Temperature	T <sub>stg,Tj</sub>	-55 to +150	°C

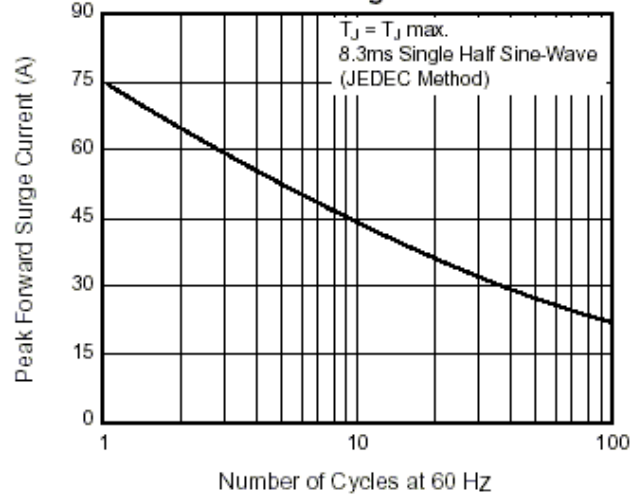
#### Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V<sub>dc</sub>
3. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

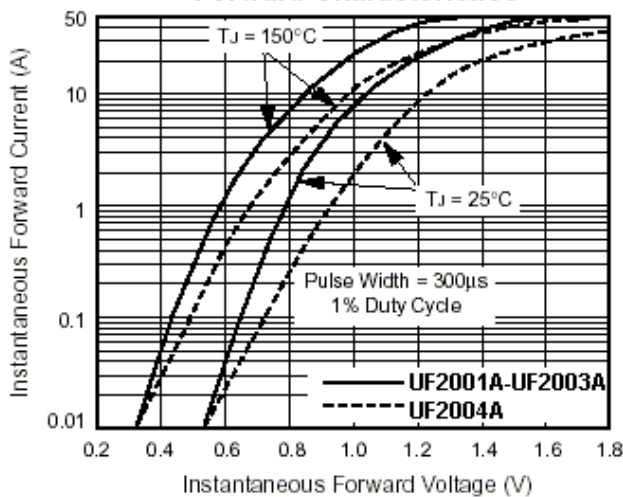
**Fig. 1 – Maximum Forward Current Derating Curve**



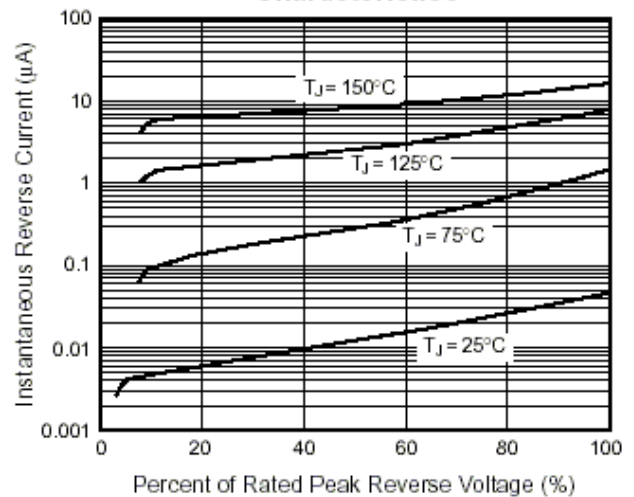
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



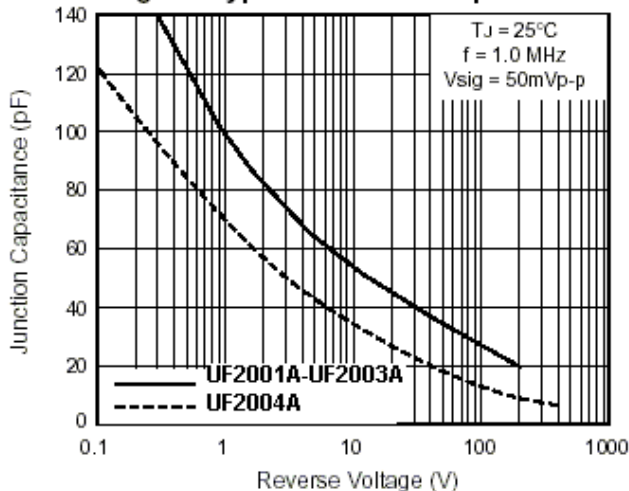
**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Characteristics**



**Fig. 5 – Typical Junction Capacitance**



**Fig. 6 – Typical Transient Thermal Impedance**

