

UF2004A

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 400V

CURRENT: 2.0A



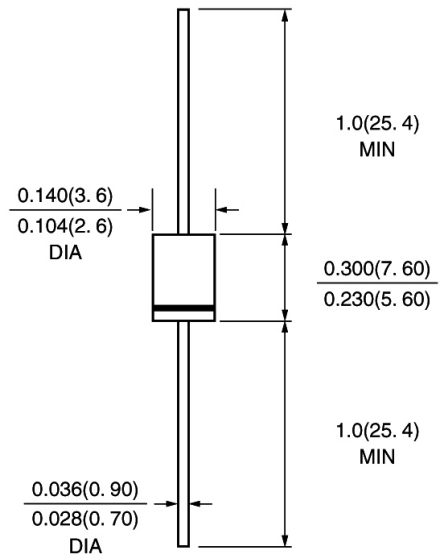
FEATURE

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

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_d
3. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

Fig. 1 – Maximum Forward Current Derating Curve

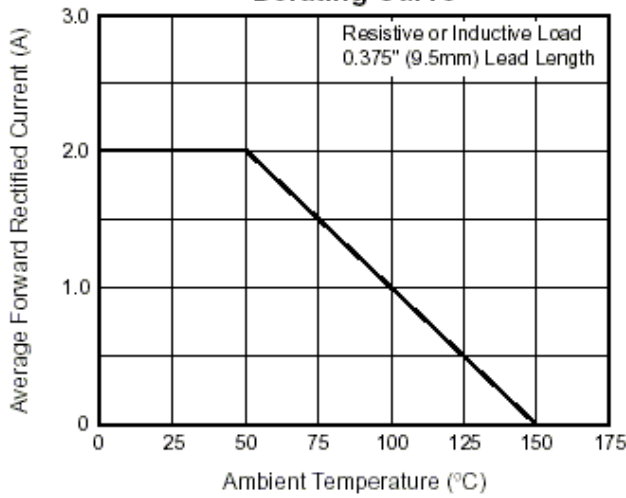


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

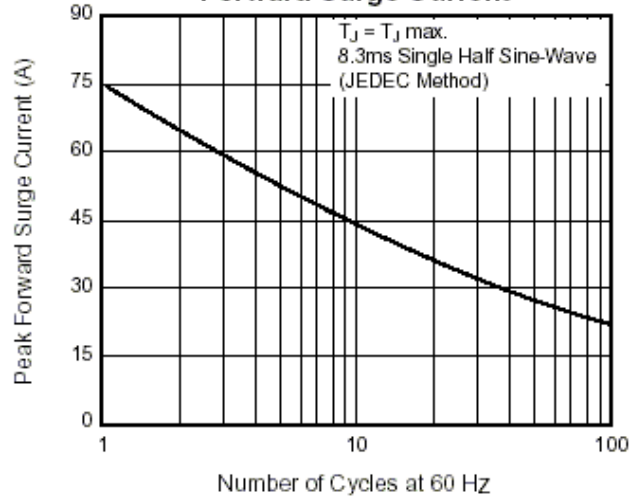


Fig. 3 – Typical Instantaneous Forward Characteristics

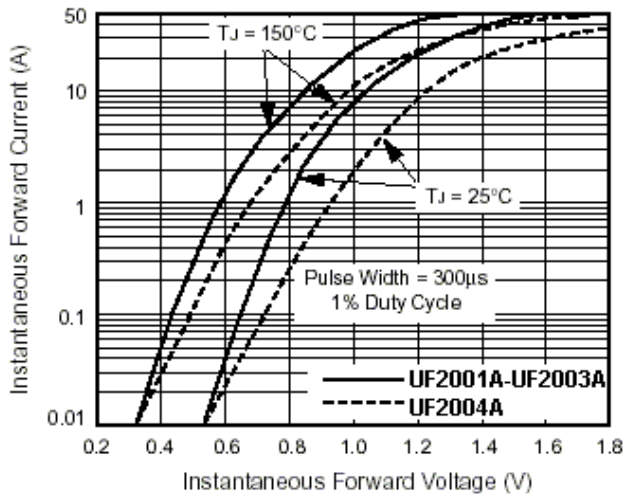


Fig. 4 – Typical Reverse Characteristics

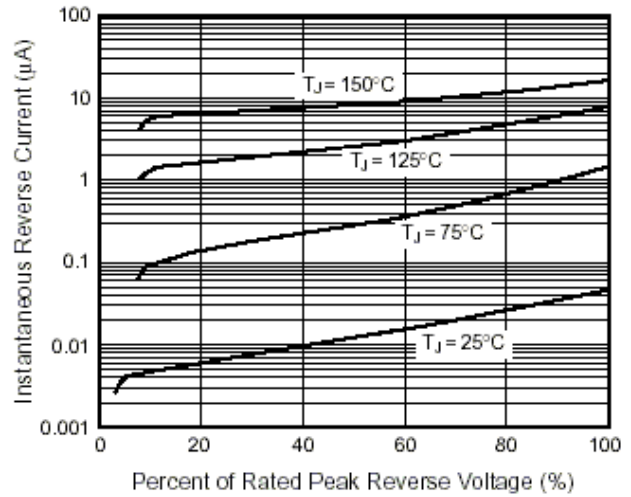


Fig. 5 – Typical Junction Capacitance

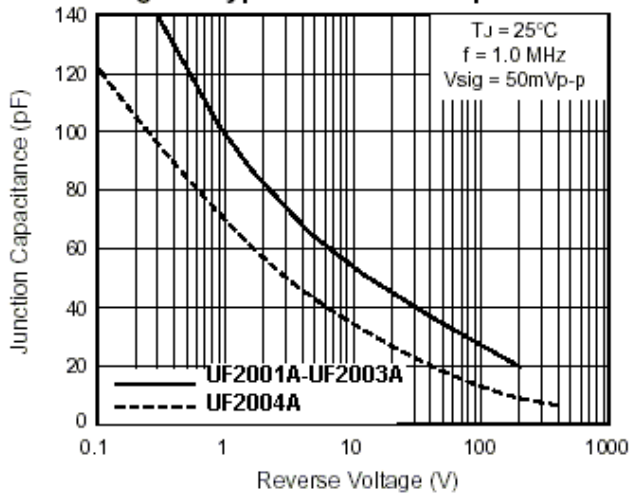


Fig. 6 – Typical Transient Thermal Impedance

