UF2001-E THRU UF2007-E

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 to 1000V **CURRENT: 2.0A**

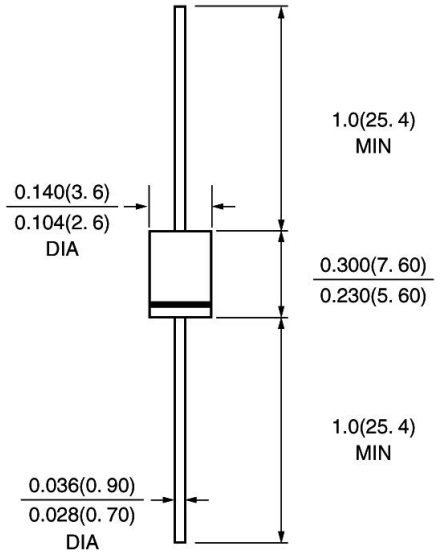
FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
260℃/10sec/0.375″ lead length
Halogen Free

MECHANICAL DATA

Terminal: Plated axial leads solderable per J-STD-002
Case: Molded with UL-94 Class V-0 recognized Halogen Free 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℃, unless otherwise stated)

	Symbol	UF2001-E	UF2002-E	UF2003-E	UF2004-E	UF2005-E	UF2006-E	UF2007-E	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8″lead length at Ta =50℃	If(av)	2.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	60.0							A
Maximum Forward Voltage at Forward current 2.0A Peak	Vf	1.0			1.3	1.7			V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	5.0 100.0							μA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS
Typical Junction Capacitance (Note 2)	Cj	50				30			pF
Typical Thermal Resistance (Note 3)	Rth(ja) Rth(jc)	45 20							℃/W
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150							℃

Note：

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8″lead length, P.C. Board Mounted

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

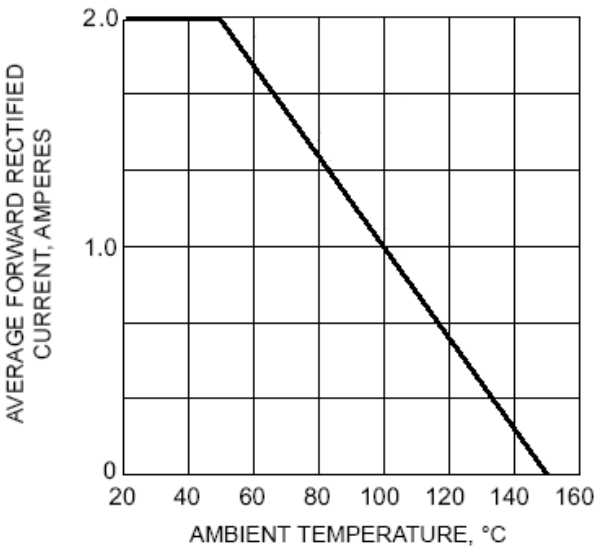


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

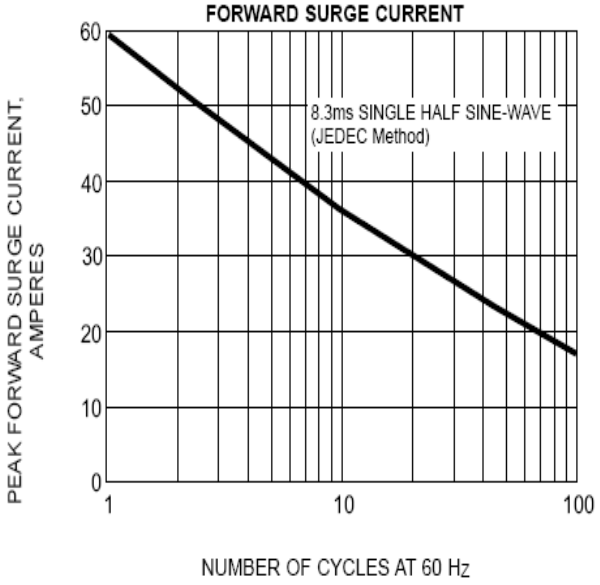


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

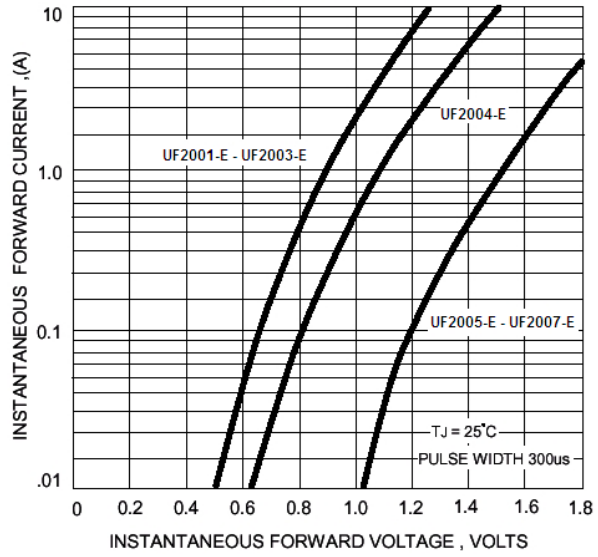


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

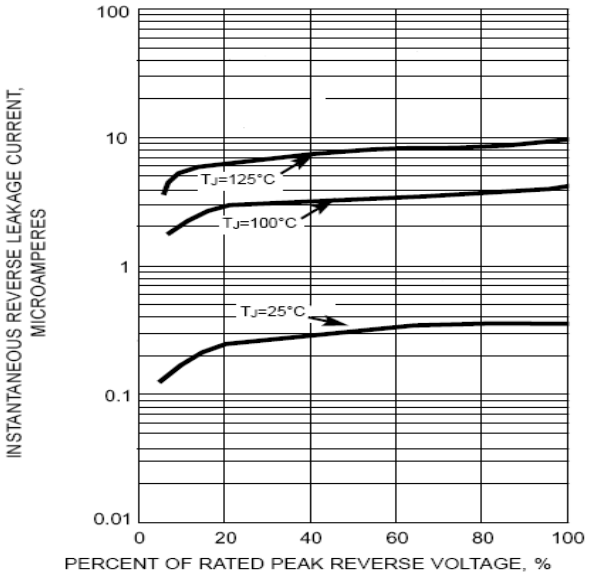


FIG.5 - TYPICAL JUNCTION CAPACITANCE