UF1001 THRU UF1007

ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER

VOLTAGE：50 TO 1000V CURRENT： 1.0A

VOLTARISTECH INC.
POWER · PRECISION · INNOVATION

FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250℃/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

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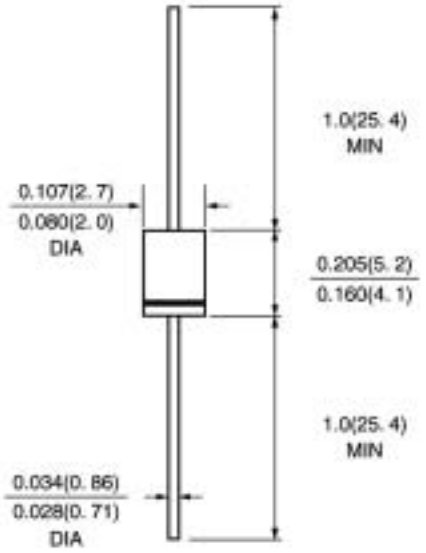

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	UF 1001	UF 1002	UF 1003	UF 1004	UF 1005	UF 1006	UF 1007	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 =55℃	If(av)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0							A
Maximum Forward Voltage at Forward current 1A Peak	Vf	1.0			1.3	1.7			V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =120℃	Ir	5.0 100.0							μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS
Typical Junction Capacitance (Note 2)	Cj	20				10			pF
Typical Thermal Resistance (Note 3)	R(ja)	25.0							℃/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 - FORWARD CURRENT DERATING CURVE

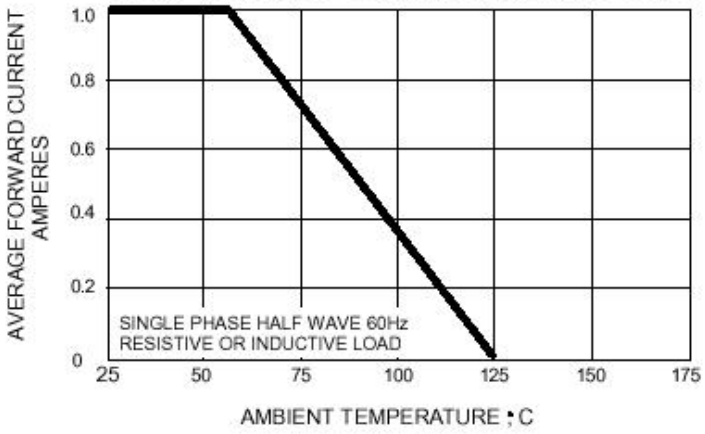

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

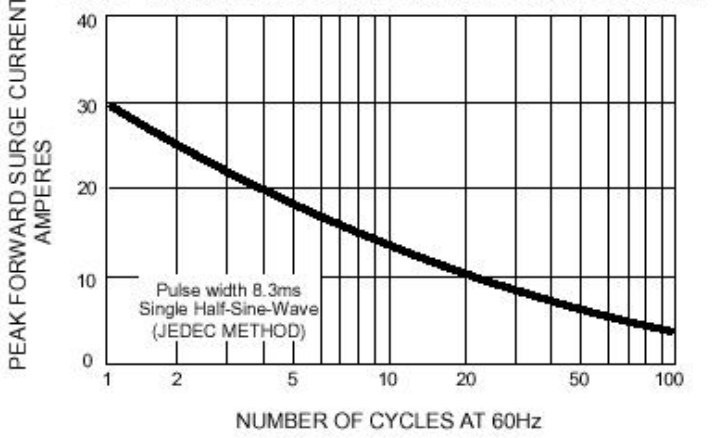

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FIG.3 - TYPICAL JUNCTION CAPACITANCE

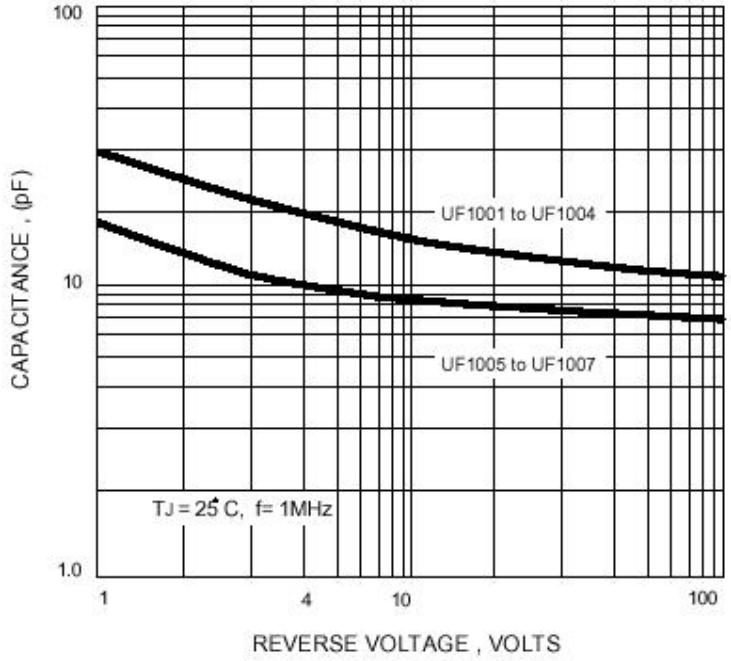
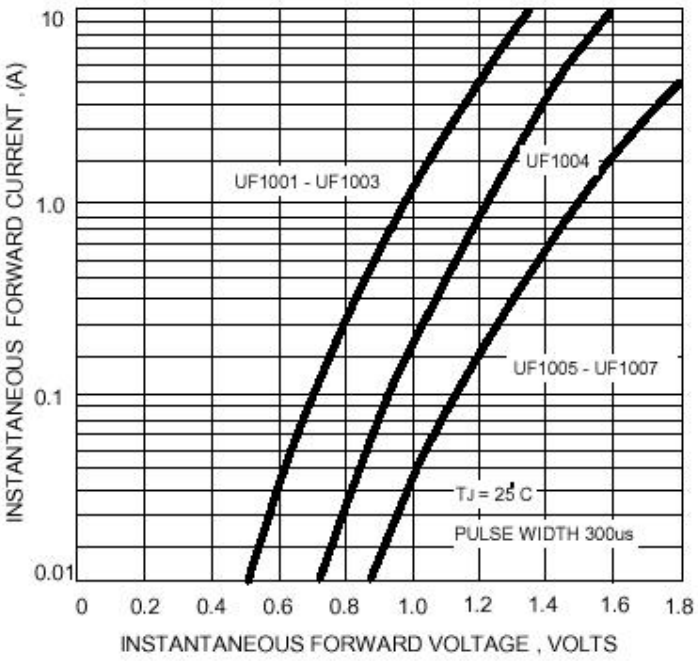


FIG.4 - TYPICAL FORWARD CHARACTERISTICS



[1] Rev.A4, 1-Jul-03