UF3001 THRU UF3007

ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER

VOLTAGE：50 TO 1000V　　CURRENT： 3.0A

GULF SEMI

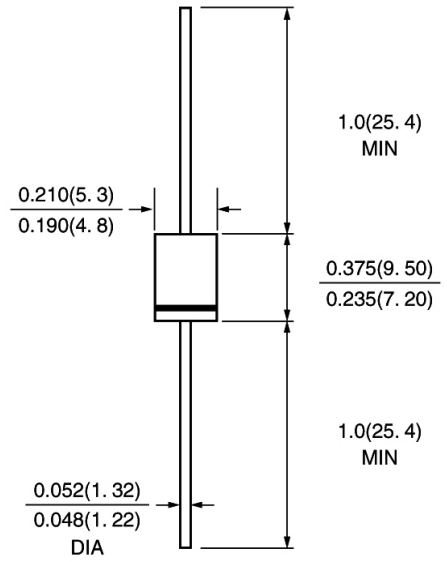
FEATURE

Low power loss
High surge capability
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

DO-201AD



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 3001	UF 3002	UF 3003	UF 3004	UF 3005	UF 3006	UF 3007	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)	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150.0							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 =125℃	Ir	10.0 100.0							μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS
Typical Junction Capacitance (Note 2)	Cj	75				50			pF
Typical Thermal Resistance (Note 3)	R(ja)	20.0							℃/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

RATINGS AND CHARACTERISTIC CURVES UF3001 THRU UF3007

FIG.1 - FORWARD CURRENT DERATING CURVE

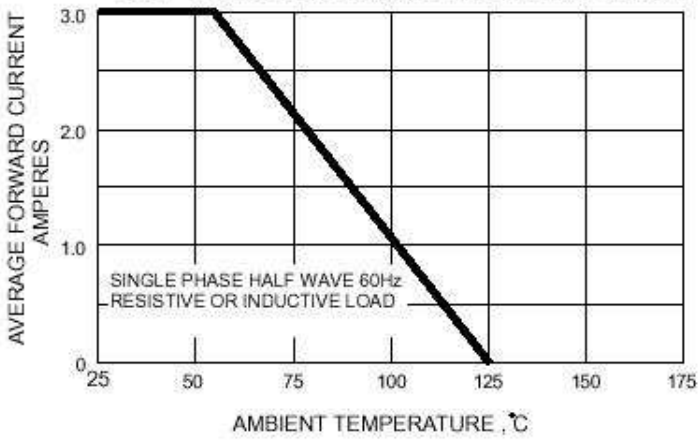


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

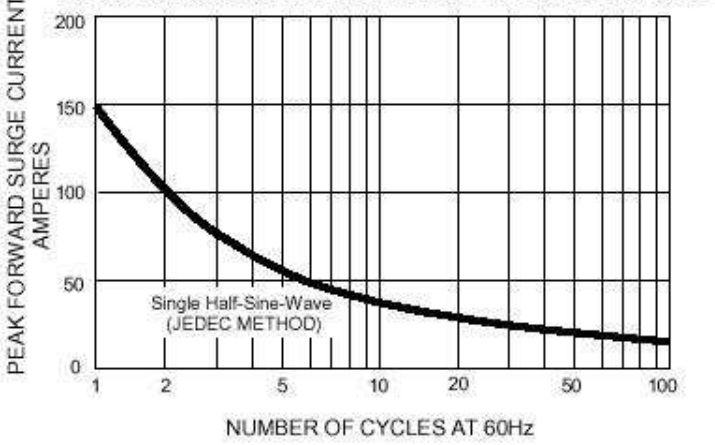


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FIG.3 - TYPICAL JUNCTION CAPACITANCE

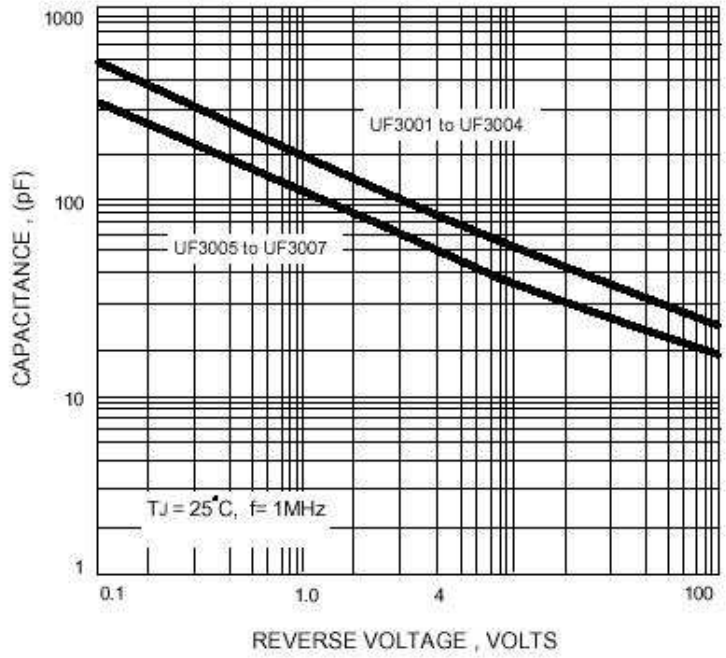

FIG.4 - TYPICAL FORWARD CHARACTERISTICS