UF4001G THRU UF4007G

1.0 AMP. GLASS PASSIVATED ULTRA FAST RECTIFIERS

VOLTAGE RANGE
50 to 800 Volts
CURRENT
1.0 Amperes

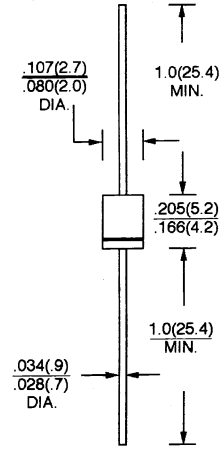
FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V – 0 rate flame retardant
* Lead: Axial leads, solderable per MIL – STD – 202, method 208 guaranteed
* Polarity: Color band denotes cathode end
* Mounting Position: Any
* Weight: 0.34 grams

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	UF 4001G	UF 4002G	UF 4003G	UF 4004G	UF 4005G	UF 4006G	UF 4007G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length @ T_A = 50℃	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1				1.4			V
Maximum D.C Reverse Current @ T_A = 25℃ at Rated D.C Blocking Voltage @ T_A = 125℃	I_R	5.0 150							μA μA
Maximum Reverse Recovery Time(Note 1)	T_{RR}	50				75			nS
Typical Junction Capacitance (Note 2)	C_J	20				15			pF
Operating and Storage Temperature Range	T_J, T_{STG}	– 65 to + 150							℃

NOTES: 1. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.
2. Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (UF4001G THRU UF4007G)

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

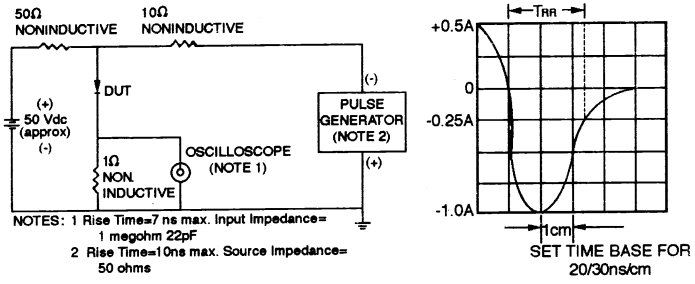


FIG.2 – TYPICAL FORWARD CURRENT DERATING CURVE

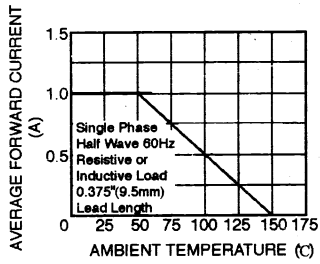


FIG.3 – TYPICAL REVERSE CHARACTERISTICS

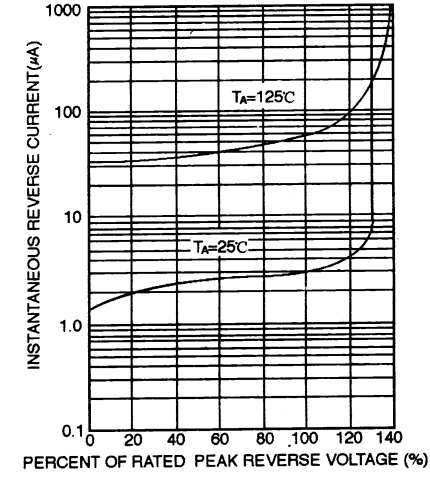


FIG.4 – TYPICAL FORWARD CHARACTERISTICS

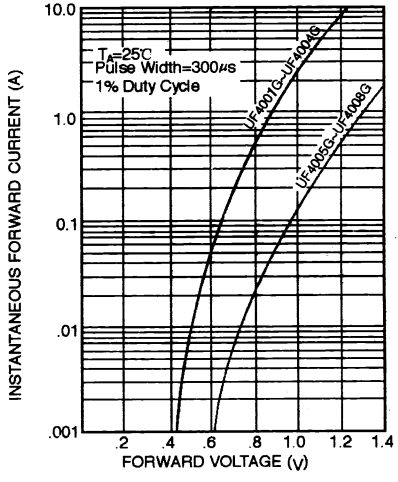


FIG.5 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT

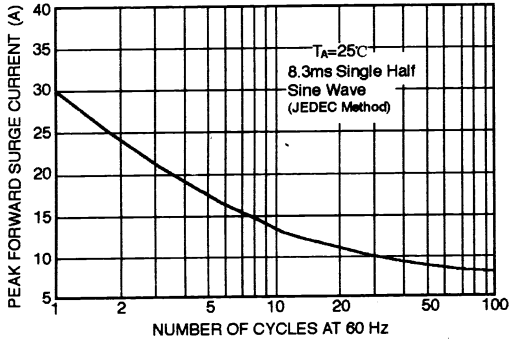


FIG.6 – TYPICAL JUNCTION CAPACITANCE

