UF4001-UF4007

HIGH EFFICIENCY RECTIFIERS

VOLTAGE RANGE: 50--- 1000 V CURRENT: 1.0 A

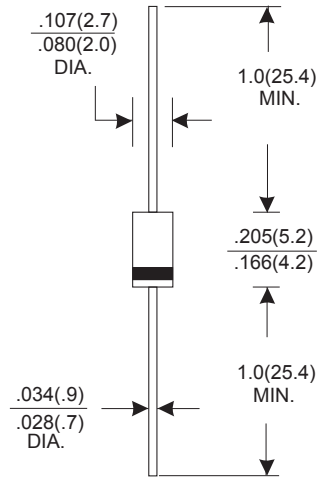
FEATURES

- ●Low cost
- ●Low leakage
- ●low forward voltage drop
- ●High cleaned with Alcohol,isopropanol and similar solvents
- ●The plastic material carries U/L recognition94V-0

MECHANICAL DATA

- ●Case: DO-41,molded plastic
- ●Epoxy: UL 94V-0 rate flame retardant
- ●Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- ●Polarity: Color band denotes cathode end
- ●Mounting position: Any

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.
For capacitive load,derate by 20%.

		UF4001	UF4002	UF4003	UF4004	UF4005	UF4006	UF4007	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 DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current.375"(9.5mm) Lead Length at Ta=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}	30.0							A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0				1.7			V
Maximum reverse current @T_A=25	I_R	5.0							μA
at rated DC blocking voltage @T_A=100		100.0							
Maximum reverse recovery time	t_{rr}	50					75		ns
Typical junction capacitance (Note1)	C_J	20							pF
Typical thermal resistance(Note2)	$R_{\theta JA}$	60							℃/W
Operating junction temperature range	T_j	- 55 ---- + 125							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARDCHARACTERISTICS

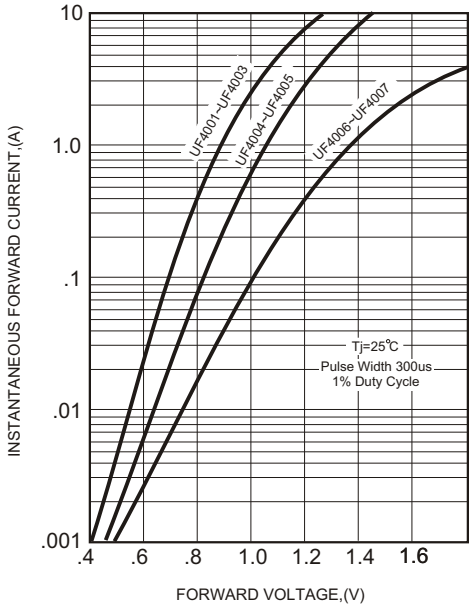


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

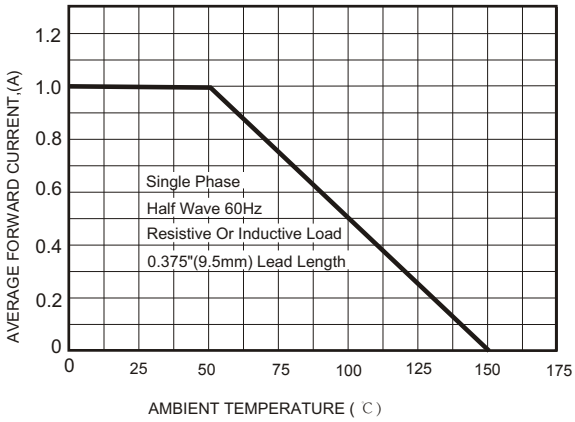
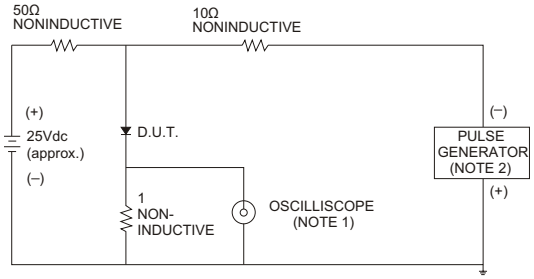


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

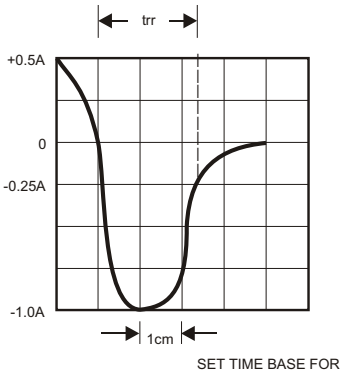


FIG.5-TYPICAL JUNCTION CAPACITANCE