UF5400-UF5408

HIGH EFFICIENCY RECTIFIERS

VOLTAGE RANGE: 50--- 1000 V CURRENT: 3.0 A

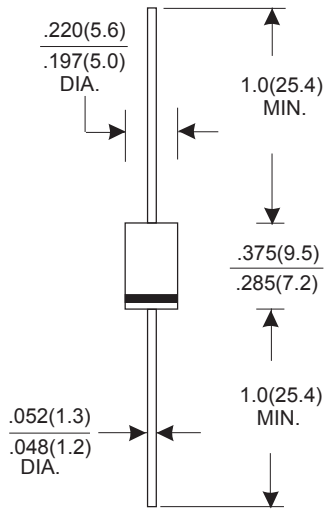
FEATURES

- 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-27,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-27



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%.

		UF 5400	UF 5401	UF 5402	UF 5403	UF 5404	UF 5405	UF 5406	UF 5407	UF 5408	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	3.0									A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125 ℃	I_{FSM}	150.0									A
Maximum instantaneous forw ard voltage @ 3.0 A	V_F	1.0					1.7				V
Maximum reverse current @T_A=25 ℃ at rated DC blocking voltage @T_A=100 ℃	I_R	10.0 100.0									μA
Maximum reverse recovery time (Note1)	t_{rr}	50					75				ns
Typical junction capacitance (Note2)	C_J	45									pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	20									℃/W
Operating junction temperature range	T_J	- 55 ----- + 125									℃
Storage temperature range	T_{STG}	- 55 ----- + 150									℃

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARDCHARACTERISTICS

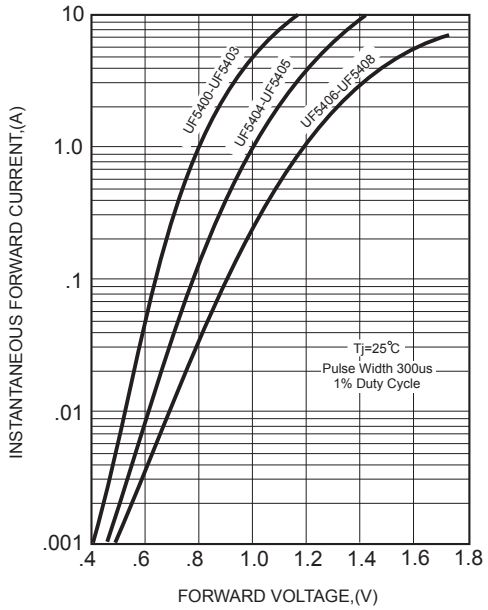


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

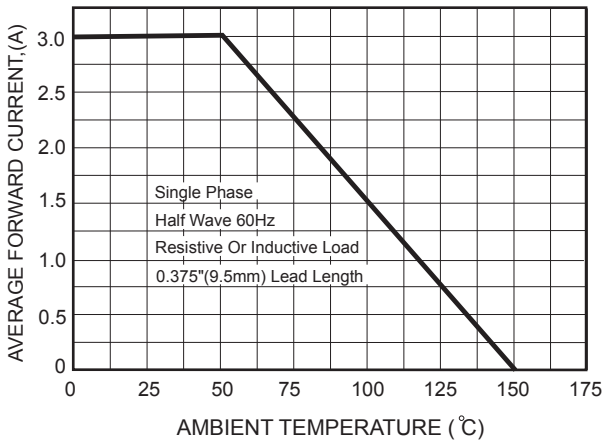
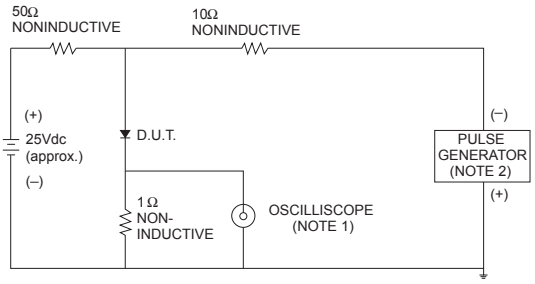
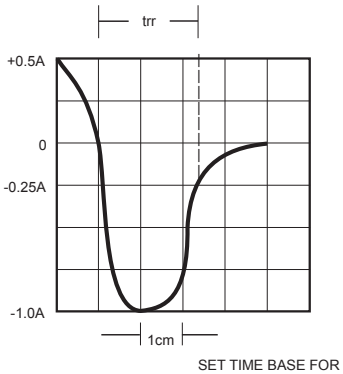


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

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



SET TIME BASE FOR

50 / 10ns / cm

FIG.5-TYPICAL JUNCTION CAPACITANCE