

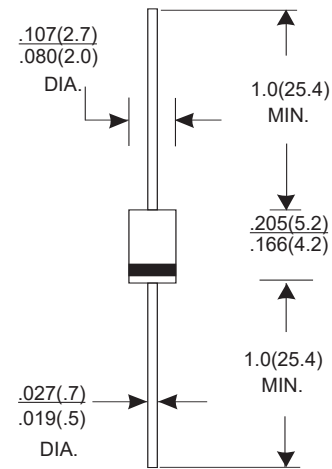
DO-41 PLASTIC SILICON RECTIFIERS

FEATURES

- Low cost
- Low leakage
- low forward voltage drop
- High cleaned with Alcohol, isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-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 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	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°C	$I_{F(AV)}$	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 at rated DC blocking voltage	@T _A =25°C	5.0							μA
	@T _A =100°C	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							°C/W
Operating junction temperature range	T_j	- 55 ---- + 125							°C
Storage temperature range	T_{STG}	- 55 ---- + 150							°C

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: FORWARD CURRENT DERATING CURVE

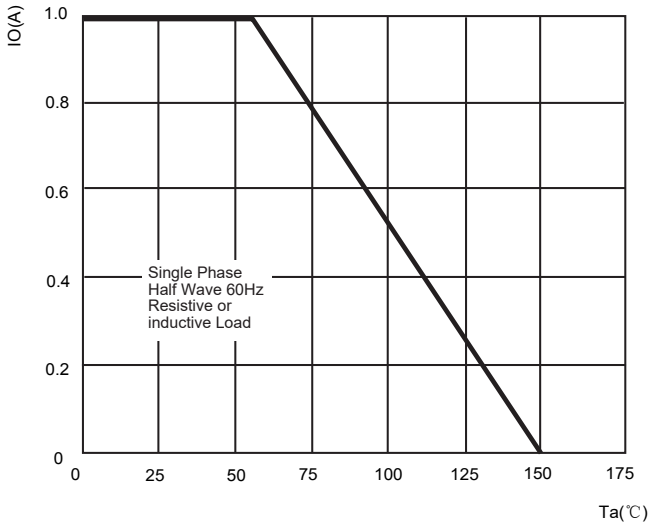


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

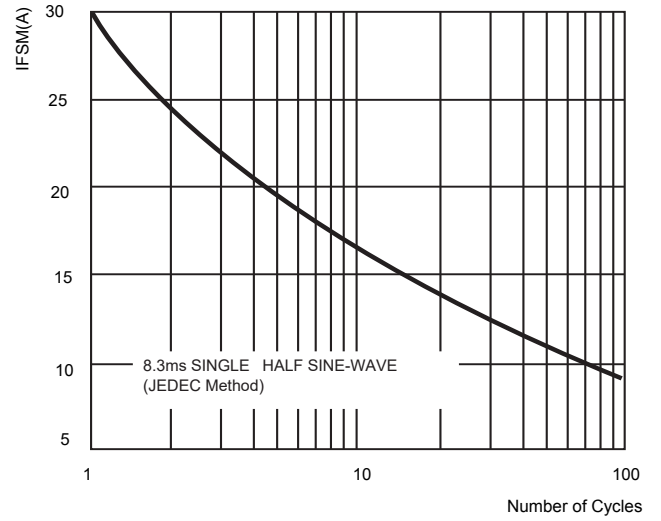


FIG.3: TYPICAL FORWARD CHARACTERISTICS

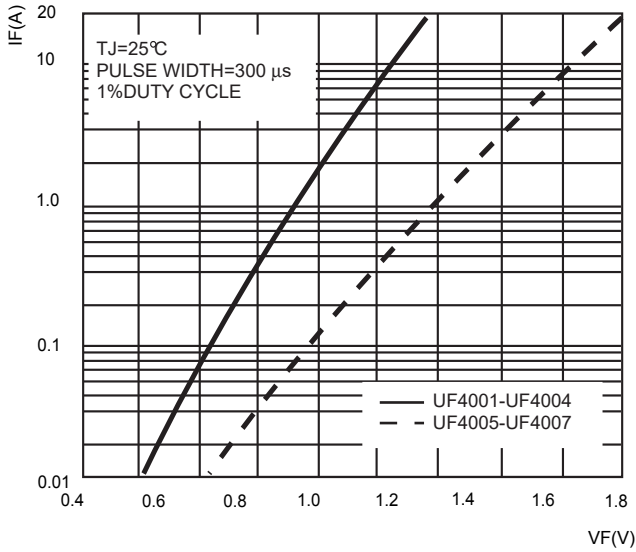


FIG.4: TYPICAL REVERSE CHARACTERISTICS

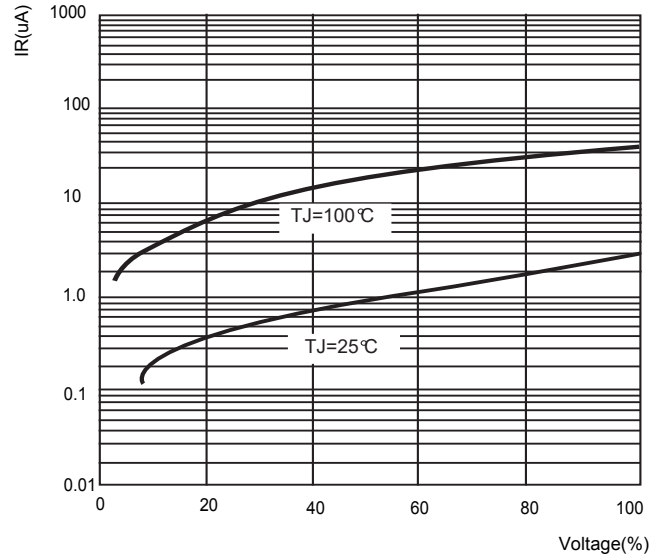


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

