

DO-41 High Efficient Rectifier Diodes

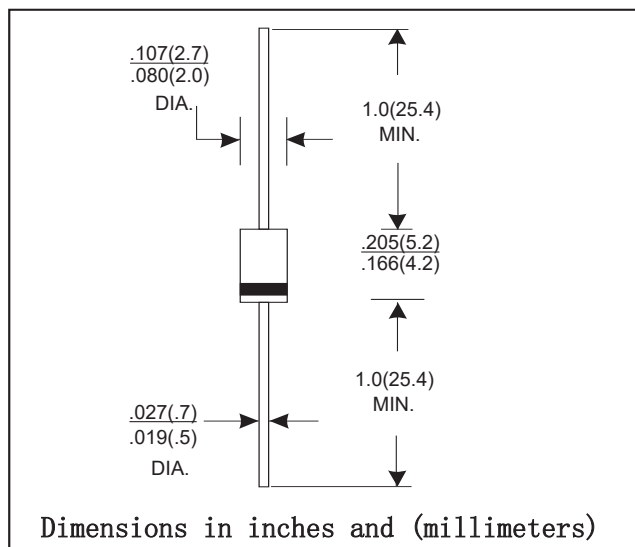
FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE

2012/19/EU

MECHANICAL DATA

- Case style: DO-41 molded plastic
- Mounting position: Any



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℃		$I_{F(AV)}$	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℃	I_R	5.0							μA
	@T _A =100℃		100.0							
Maximum reverse recovery time		t_{rr}	50					75		ns
Typical junction capacitance		C_J	20							pF
Typical thermal resistance		$R_{\theta JA}$	60							℃/W
Operating junction temperature range		T_j	- 55 ---- + 125							℃
Storage temperature range		T_{STG}	- 55 ---- + 150							℃

RATINGS AND CHARACTERISTIC CURVES

FIG.1: FORWARD CURRENT DERATING CURVE

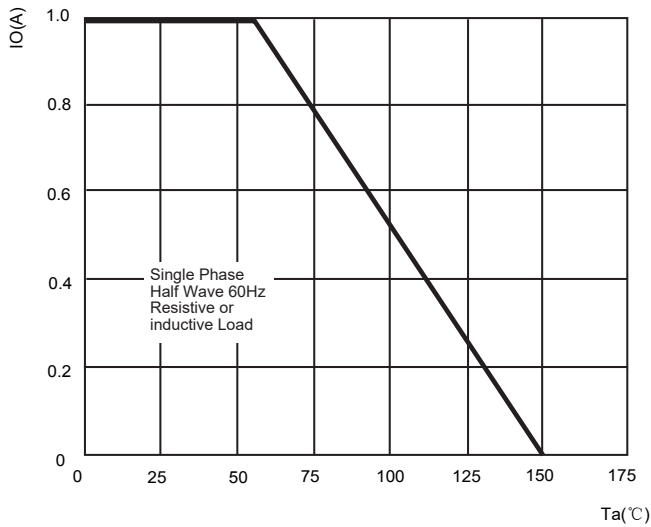


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

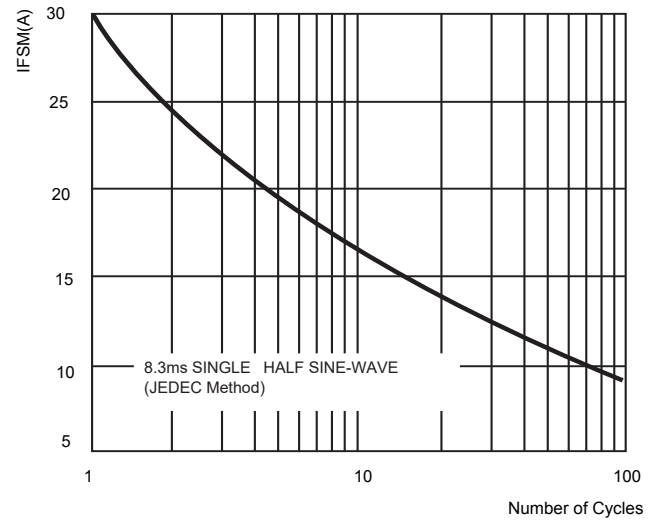


FIG.3: TYPICAL FORWARD CHARACTERISTICS

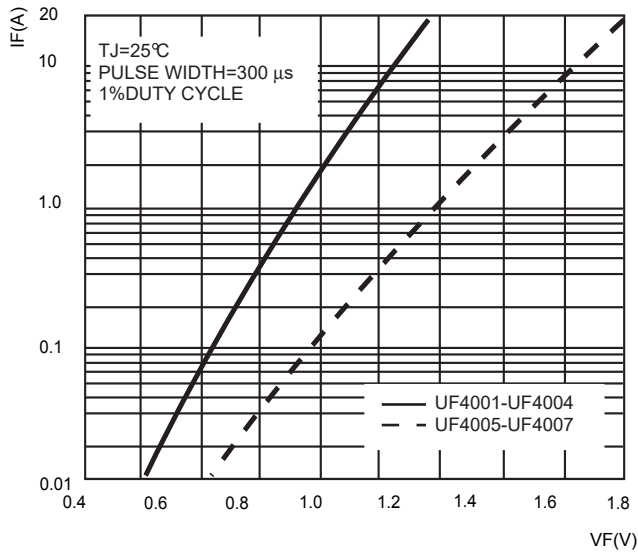


FIG.4: TYPICAL REVERSE CHARACTERISTICS

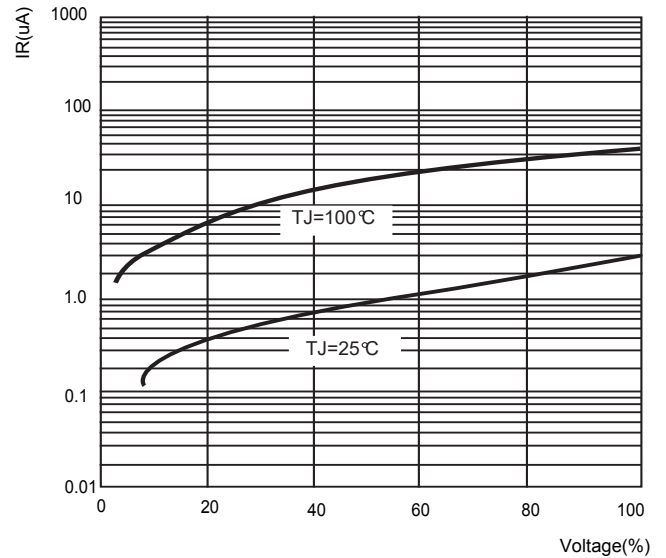


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

