

### Axial Lead Ultra Fast Rectifiers

**(Pb)** Lead(Pb)-Free

#### Features:

- \*Low forward voltage drop
- \*High current capability
- \*High reliability
- \*High surge current capability
- \*High speed switching

#### 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 en
- \*Mounting position: Any
- \*Weight: 0.34grams

**REVERSE VOLTAGE**  
**50-1000 VOLTS**  
**FORWARD CURRENT**  
**1.0 AMPERE**

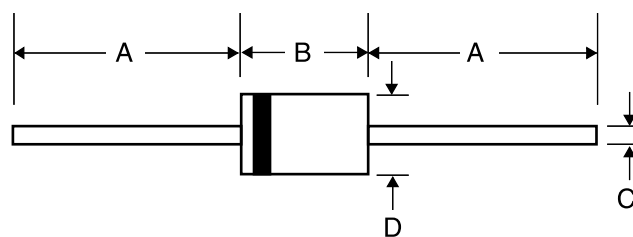


**DO-41**

### DO-41 Outline Dimensions

Unit:mm

#### Axial Device (Through-Hole)

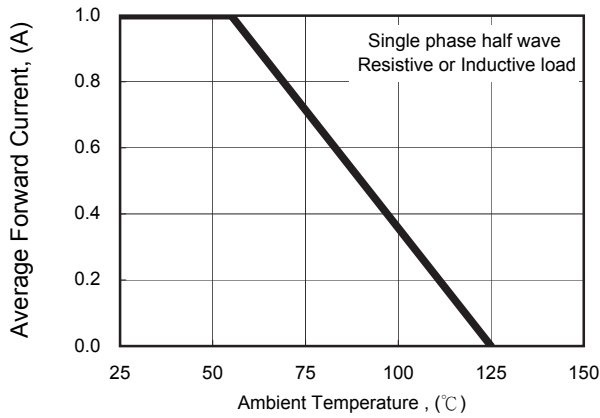


Dim	A		B		C		D	
	Min	Max	Min	Max	Min	Max	Min	Max
DO-41	25.40	-	4.06	5.20	0.70	0.90	2.00	2.70

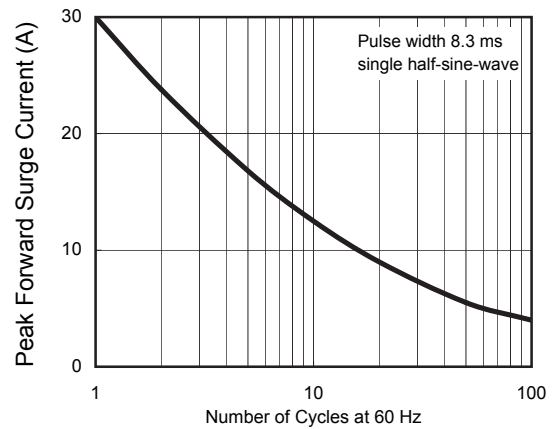
**Maximum Rating**

Characteristic	Symbol	UF4001	UF4002	UF4003	UF4004	UF4005	UF4006	UF4007	Units
Maximum repetitive peak reverse voltage @ $I_T = 5\mu A$	$V_{RRM}$	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 @ $T_a = 55^\circ C$	$I_F$	1.0							A
Maximum Instantaneous Forward Voltage at Specified Current	$V_F$	1.0				1.7			V
Maximum DC Reverse Current	$I_R$	5.0							$\mu A$
Maximum Reverse Recovery Time	$T_{rr}$	50				75			nS
Operating and Storage temperature range	$T_j, T_{STG}$	-55 to +150							$^\circ C$

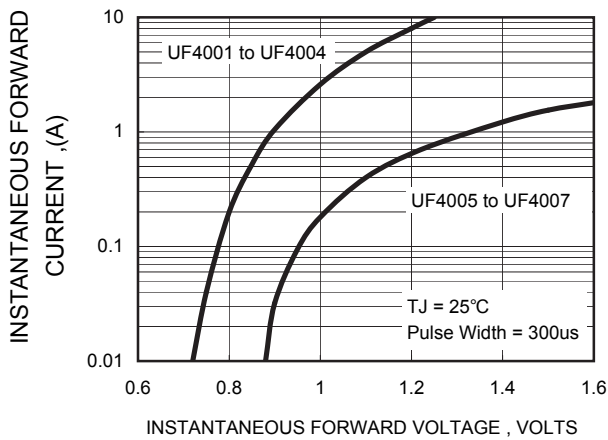
## RATING AND CHARACTERISTIC CURVES



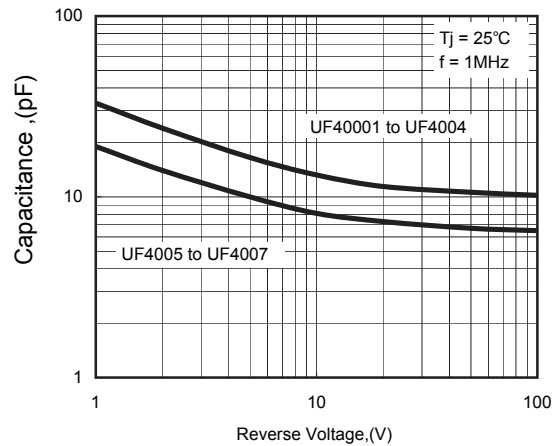
**Fig. 1 - Forward Current Derating Curve**



**Fig. 2 - Peak Forward Surge Current**



**Fig. 3 - Typical Forward Characteristics**



**FIG.4 - Typical Junction Capacitance**