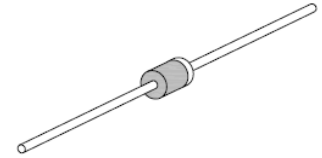


## 1.0A Ultra Fast Recovery Rectifier

### Features

- Low coat construction
- Low forward voltage drop, high current capability
- Low leakage, high forward surge capability
- High temperature soldering guaranteed: 250°C, 0.375" (9.5mm), lead length for 10 seconds, 5 lbs. (2.3kg) tension
- RoHS Compliance



DO-41



### Mechanical Data

<b>Case:</b>	JEDEC DO-41 molded plastic
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Axial leads, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Mounting Position:</b>	Any
<b>Weight:</b>	0.012 ounce, 0.34 gram

### Maximum Ratings and Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Description	UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006	UF 4007	Unit	Conditions
<b>V<sub>RRM</sub></b>	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>V<sub>RMS</sub></b>	Max. RMS Voltage	35	70	140	280	420	560	700	V	
<b>V<sub>DC</sub></b>	Max. DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>I<sub>F(AV)</sub></b>	Max. Average Forward Rectified Current	1.0							A	0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	30							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>V<sub>F</sub></b>	Max. Instantaneous Forward Voltage	1.0				1.7			V	$I_F(AV)=1.0A$ ,
<b>I<sub>R</sub></b>	Max. DC Reverse Current at Rated DC Blocking Voltage	10							$\mu\text{A}$	$T_A=25^\circ\text{C}$
		50								$T_A=100^\circ\text{C}$

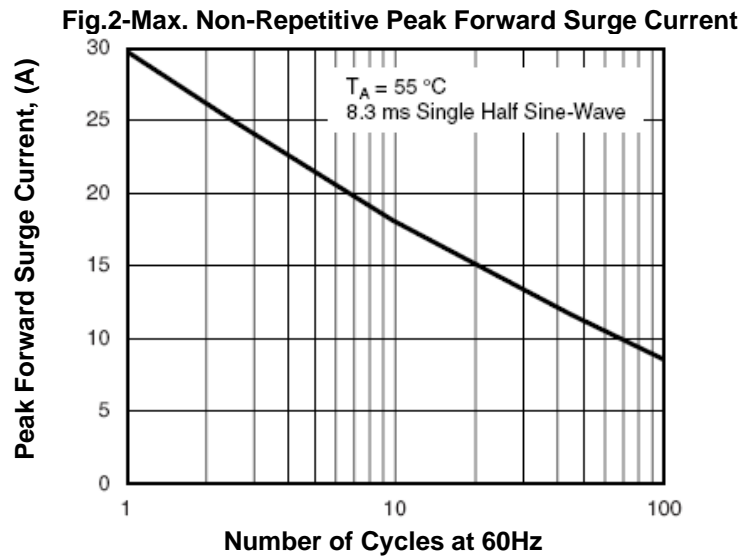
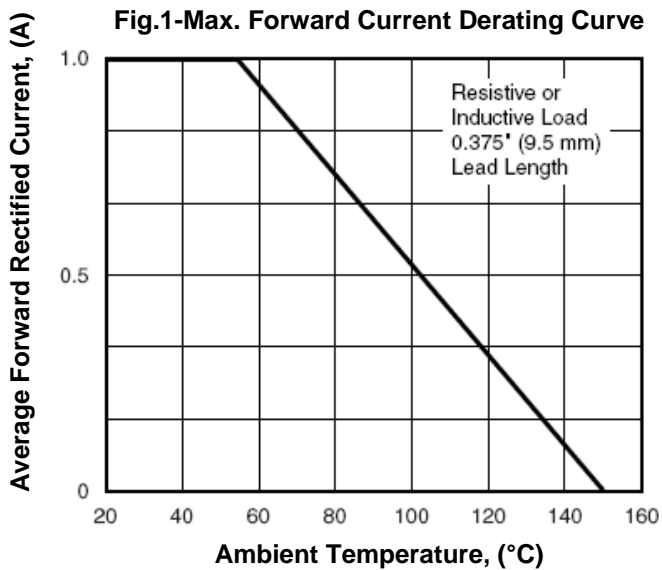
# 1.0A Ultra Fast Recovery Rectifier

## UF4001 - UF4007

Symbol	Description	UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006	UF 4007	Unit	Conditions	
$T_{rr}$	Max. Reverse Recovery Time	50				75			nS	$I_F=0.5A$ , $I_R=1.0A$ , $I_{rr}=0.25A$	
$C_J$	Typical Junction Capacitance	15								pF	$V_R=4V$ , $f=1MHz$
$R_{thJA}$	Typical Thermal Resistance	60								°C / W	Note 1
$T_J$ , $T_{STG}$	Operating Junction and Storage Temperature Range	-55 to +150								°C	

**Note:** 1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length.

### Typical Characteristics Curves



# 1.0A Ultra Fast Recovery Rectifier

## UF4001 - UF4007

Fig.3-Typical Instantaneous Forward Characteristics

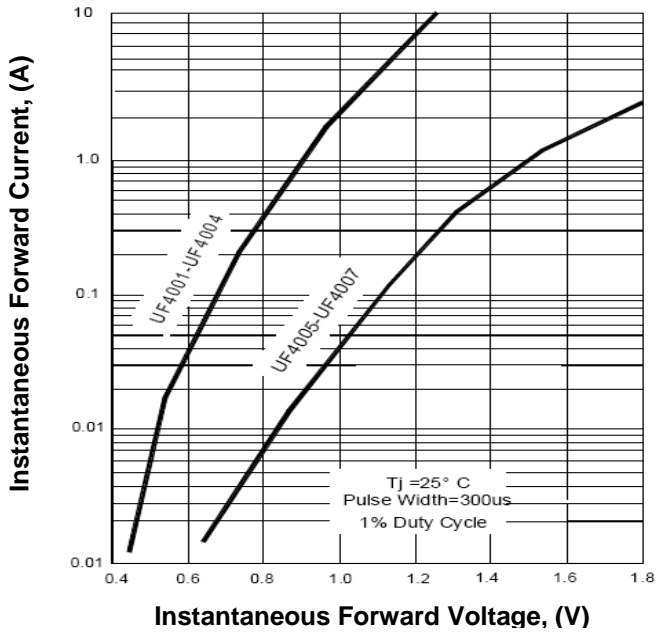


Fig.4-Typical Reverse Characteristics

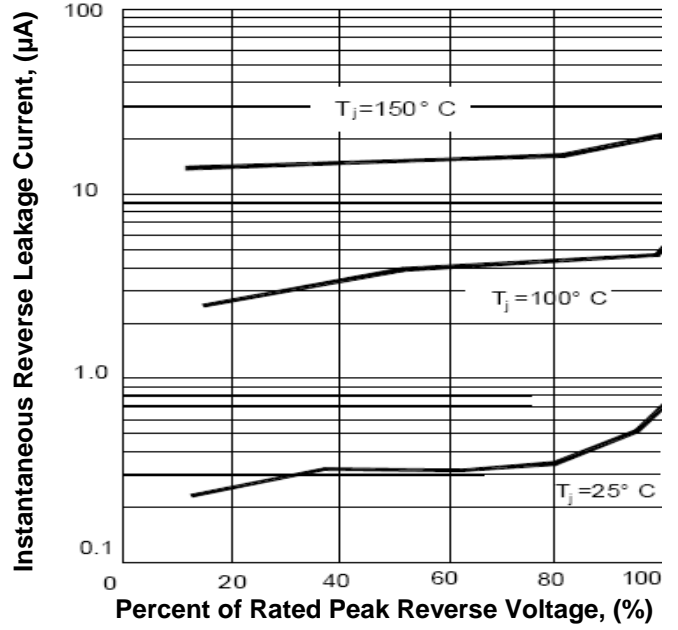
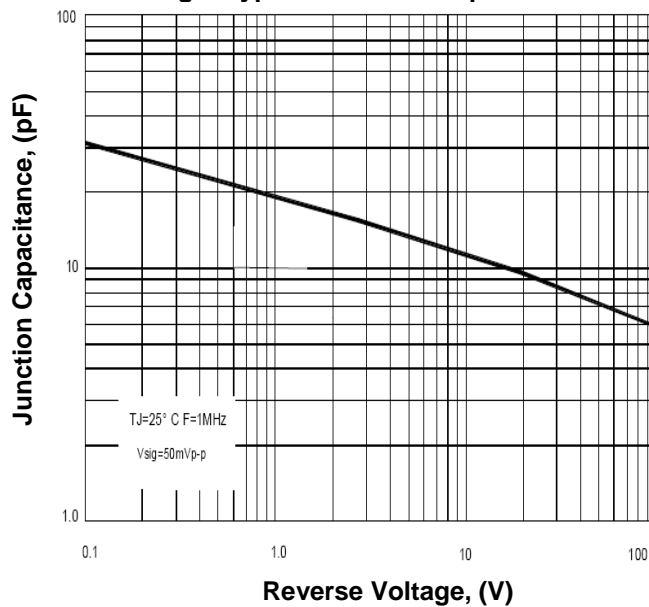


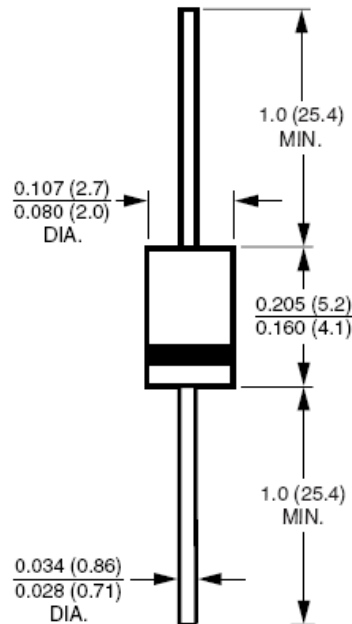
Fig.5-Typical Junction Capacitance



# 1.0A Ultra Fast Recovery Rectifier

## UF4001 - UF4007

### Dimensions in inches (mm)



DO-41

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