

# UF4007

## Fast Rectifiers

- Low forward voltage drop
- High surge current capability
- High reliability
- High current capability



**DO-41 (Plastic)**  
COLOR BAND DENOTES CATHODE

### Absolute Maximum Ratings\* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		4001	4002	4003	4004	4005	4006	4007	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
I <sub>F(AV)</sub>	Average Rectified Forward Current, .375" lead length @ T <sub>A</sub> = 75°C	1.0							A
I <sub>FSM</sub>	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	30							A
T <sub>STG</sub>	Storage Temperature Range	-65 to +150							°C
T <sub>J</sub>	Operating Junction Temperature	-65 to +150							°C

\* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Thermal Characteristics

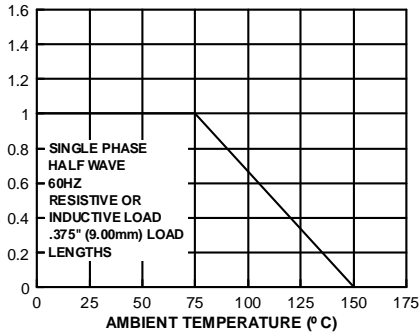
Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	2.08	W
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	60	°C/W
R <sub>θJL</sub>	Thermal Resistance, Junction to Lead	30	°C/W

### Electrical Characteristics T<sub>a</sub> = 25°C unless otherwise noted

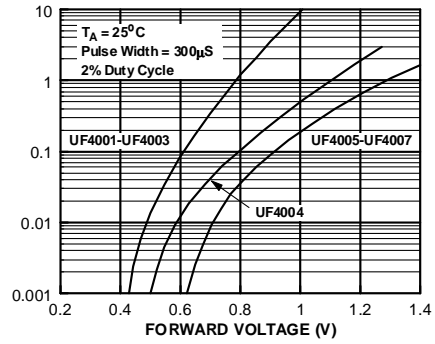
Symbol	Parameter	Value							Units
		4001	4002	4003	4004	4005	4006	4007	
V <sub>F</sub>	Forward Voltage @ 1.0A	1.0			1.7				V
t <sub>rr</sub>	Reverse Recovery Time I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>RR</sub> = 0.25A	50			75				ns
I <sub>R</sub>	Reverse Current @ Rated V <sub>R</sub> T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	10			50				μA μA
C <sub>T</sub>	Total Capacitance V <sub>R</sub> = 4.0V, f = 1.0MHz	17							pF

## Typical Performance Characteristics

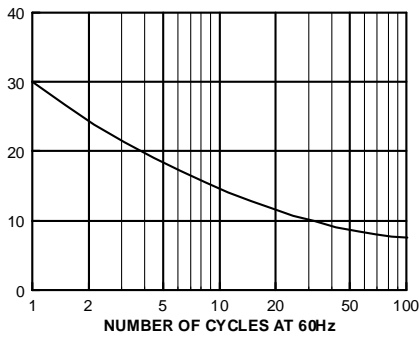
**Forward Characteristics**



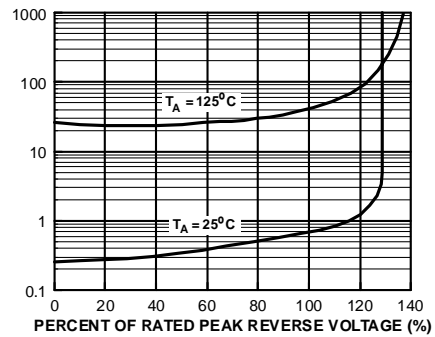
**Forward Characteristics**



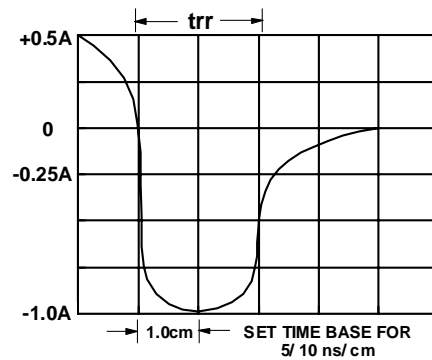
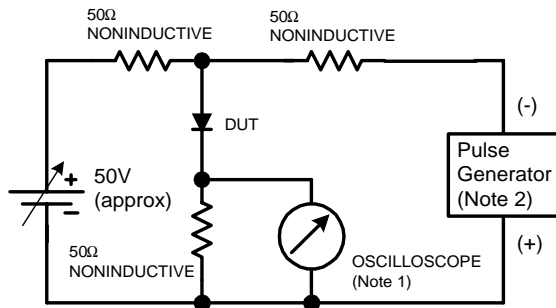
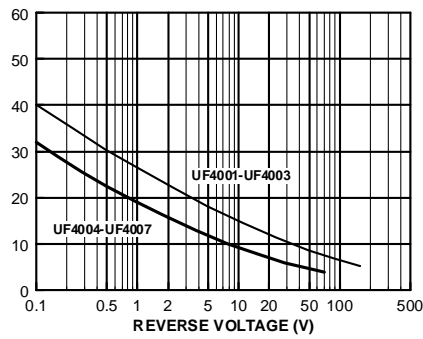
**Non-Repetitive Surge Current**



**Reverse Characteristics**



**Typical Junction Capacitance**



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FACT™	ImpliedDisconnect™	OCX™	RapidConfigure™	TruTranslation™
FACT Quiet Series™		OCXPro™	RapidConnect™	UHC™
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