



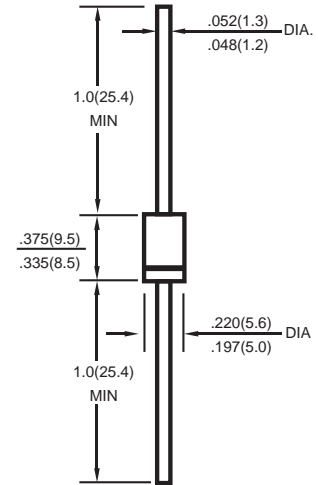
### DO-201AD/DO-27

## Features

- ✧ Low power loss, high efficiency.
- ✧ Low leakage.
- ✧ High speed switching.
- ✧ High current capability.
- ✧ High surge capability.
- ✧ High temperature soldering guaranteed:  
260°C/10 seconds/0.375" (9.5mm) lead length  
at 5 lbs (2,3kg) tension

## Mechanical Data

- ✧ **Case:** Transfer molded plastic
- ✧ **Epoxy:** UL94V-0 rate flame retardant
- ✧ **Polarity:** Color band denotes cathode end
- ✧ **Mounting position:** Any
- ✧ **Weight:** 1.2 grams



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

Type Number	SYMBOLS	UF	UF	UF	UF	UF	UF	UF	UF	UF	UNITS
		5400	5401	5402	5403	5404	5405	5406	5407	5408	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	350	420	560	760	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	3.0									Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150									Amps
Maximum Instantaneous Forward Voltage Drop at 3.0A	$V_F$	1.0			1.3			1.7			Volts
Maximum DC Reverse Current at rated DC blocking voltage $T_A=25^\circ\text{C}$	$I_R$	5.0									$\mu\text{A}$
Maximum Reverse Recovery Time(NOTE 1)	$t_{rr}$	50				75					nS
Typical Junction Capacitance(NOTE2)	$C_J$	70				50					pF
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150									$^\circ\text{C}$

### NOTES:

1. Test condition:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ .  $I_{RR}=0.25\text{A}$ .

2. Measured at 1MHz and applied reverse of 4.0volts.

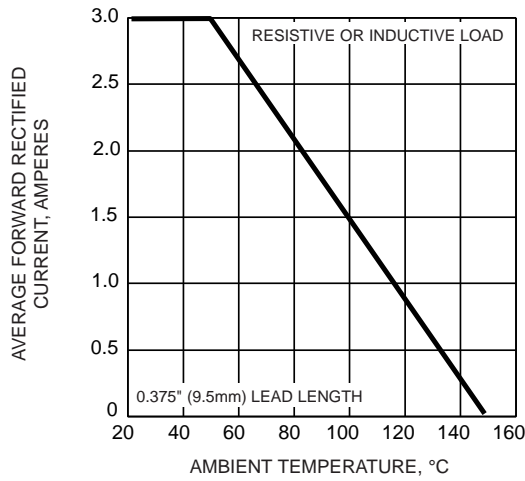
3. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, P.C.B. mounted.



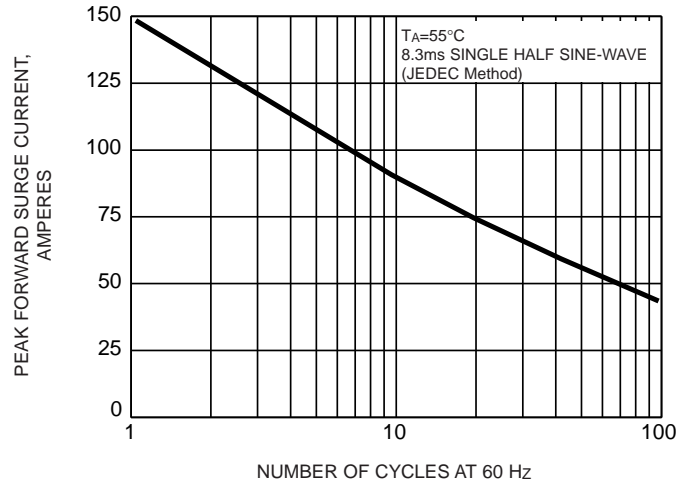
# UF5400-UF5408

## 3.0A Ultra Fast Rectifiers

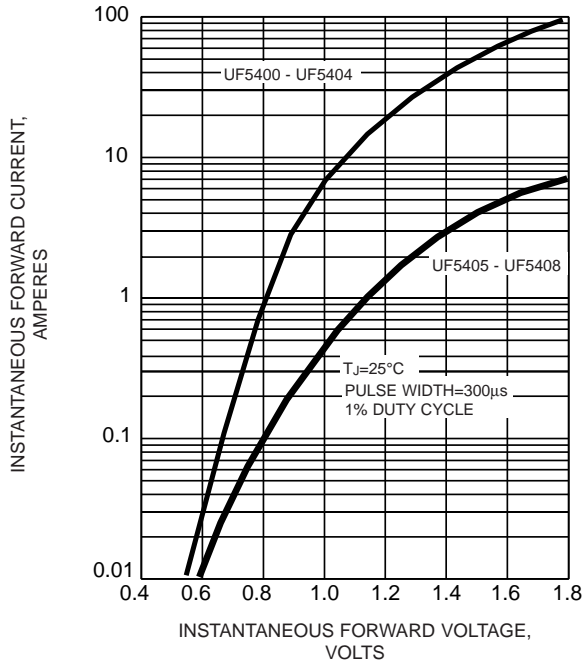
**FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE**



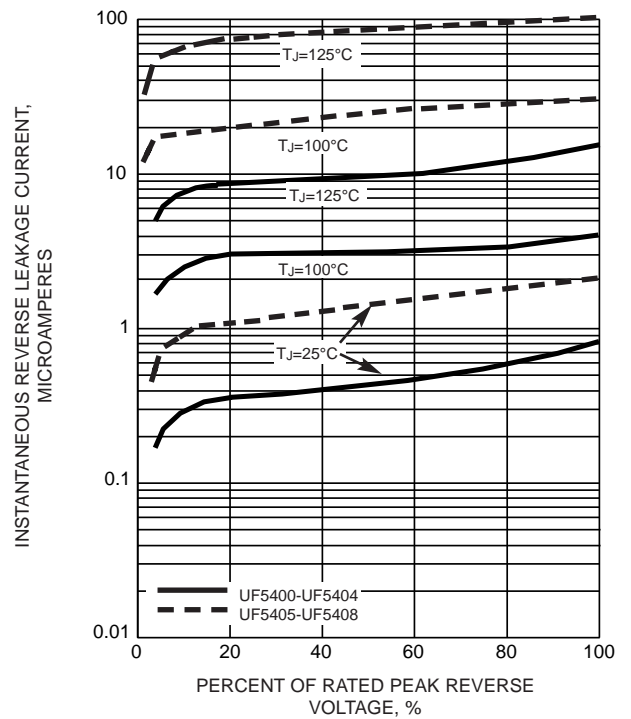
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

