

## 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 end
- \*Mounting position: Any
- \*Weight: 1.10grams

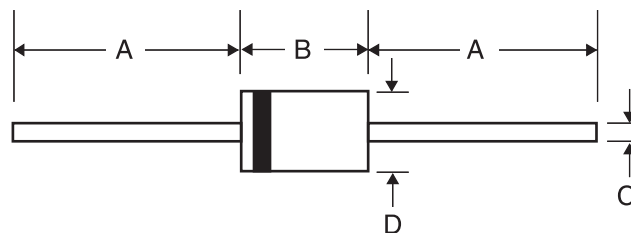
**REVERSE VOLTAGE**  
100 TO 800 VOLTS  
**FORWARD CURRENT**  
5.0 AMPERE



## DO-201AD Outline Dimensions

Unit:mm

### Axial Device (Through-Hole)



Dim	A		B		C		D	
	Min	Max	Min	Max	Min	Max	Min	Max
DO-201AD	25.40	-	7.30	9.50	1.20	1.30	4.80	5.60

## Maximum Rating

Characteristic	Symbol	UF5401	UF5402	UF5403	UF5404	UF5405	UF5406	UF5407	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	300	400	500	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	210	280	350	420	560	V
Maximum DC Blocking Voltage	$V_R$	100	200	300	400	500	600	800	V
Maximum Average Forward Rectified Current See Fig.1	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150							A
Thermal Resistance	$R_{\theta JA}$	60							°C/W
Diode Junction Capacitance f=1MHz and applied 4V DC reverse voltage	$C_J$	75							pF
Operating Junction Temperature Range	$T_J$	-55 to +150							°C
Storage Junction Temperature Range	$T_{STG}$	-55 to +150							°C
Maximum Reverse Recovery Time <sup>1</sup>	$T_{rr}$	50				75			ns

## Electrical Characteristic

Characteristic	Symbol	UF5401	UF5402	UF5403	UF5404	UF5405	UF5406	UF5407	UNIT
Maximum Instantaneous Forward Voltage $I_F=5.0A$	$V_F$	1.0			1.3	1.5		1.7	V
Maximum Instantaneous Reverse Current Rated DC Blocking Voltage, $T_A=25^\circ C$ Rated DC Blocking, $T_A=100^\circ C$	$I_R$					10.0 300			uA

Notes 1. Reverse Recovery Time test condition:  $I_F=3A$ ,  $I_R=1.0A$ ,  $IRR=0.25A$

RATING AND CHARACTERISTIC CURVES

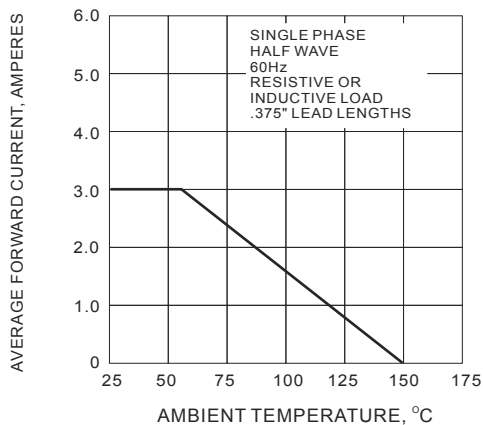


Fig. 1 - Forward Current Derating Curve

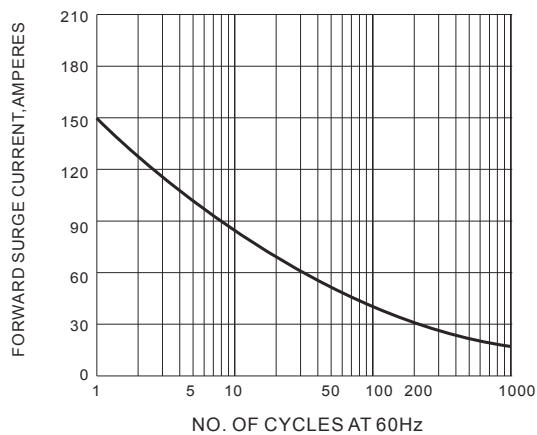


Fig. 2 - Peak Forward Surge Current

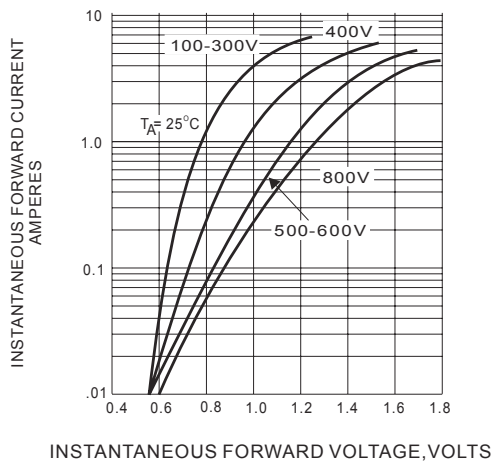


Fig. 3 - Typical Forward Characteristics

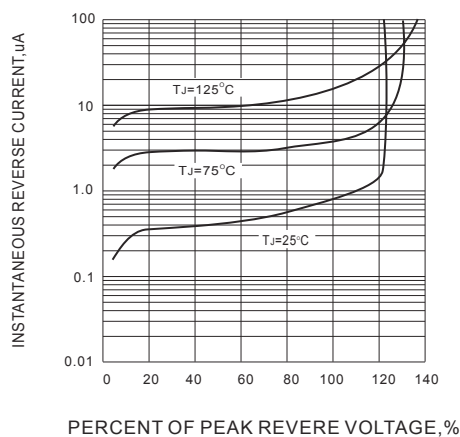


FIG.4 - Typical Reverse Leakage Characteristics