



# DATA SHEET

## UF300 thru UF3010

### ULTRAFAST RECOVERY RECTIFIERS

**VOLTAGE** 50 to 1000 Volts **CURRENT** 3.0 Amperes

DO-201AD

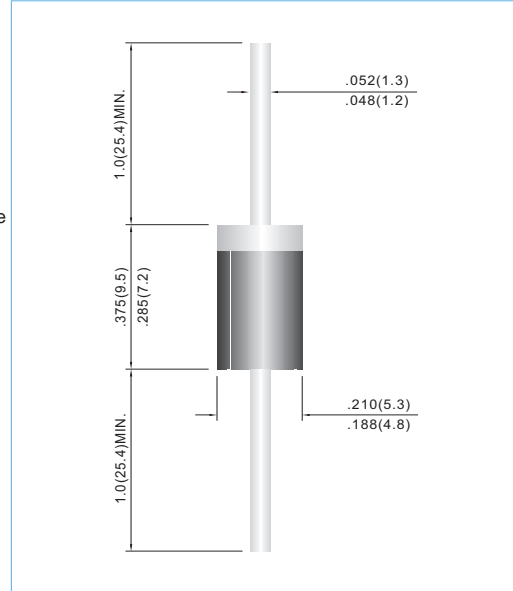
Unit: inch(mm)

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- Ultra Fast switching for high efficiency.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: Molded plastic, DO-201AD  
 Terminals: Axial leads, solderable per MIL-STD-202G, Method 208  
 Polarity: Band denotes cathode  
 Mounting Position: Any  
 Weight: 1.132 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	UF300	UF301	UF302	UF304	UF306	UF308	UF3010	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	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 Current .375"(9.5mm) lead length at $T_A=55^\circ C$	$I_{AV}$	3.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	150							A
Maximum Forward Voltage at 3.0A	$V_F$	1.0		1.1		1.7		V	
Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	$I_R$	10.0 750							$\mu A$
Typical Junction capacitance (Note 1)	$C_J$	75				50			pF
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	20							$^\circ C / W$
Maximum Reverse Recovery Time (Note 3)	$T_{RR}$	50				75			ns
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 TO +150							$^\circ C$

#### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375"(9.5mm) P.C.B. mounted.
3. Reverse Recovery Time  $I_F=.5A$  ,  $I_R=1A$  ,  $I_{RR}=25A$



**RATING AND CHARACTERISTIC CURVES**

