



# UF300G ~ UF3010G

## GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIERS

**VOLTAGE** 50 to 1000 Volt **CURRENT** 3 Ampere

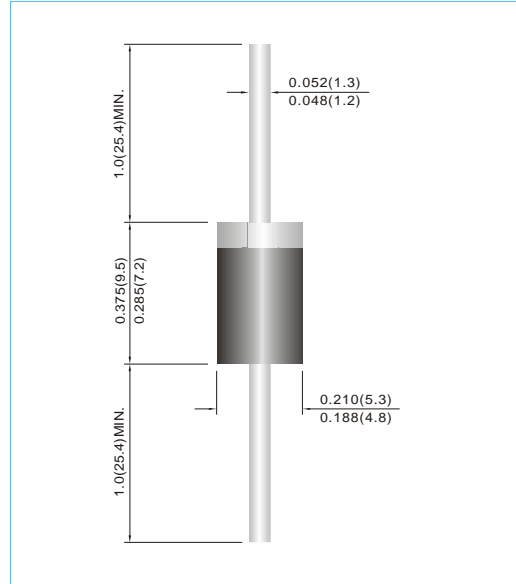
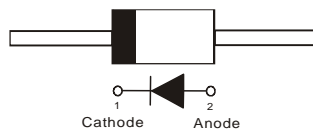
**DO-201AD** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Ultra fast switching for high efficiency.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded plastic, DO-201AD
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0403 ounce, 1.142 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	UF300G	UF301G	UF302G	UF304G	UF306G	UF308G	UF3010G	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 0.375"(9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	3							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150							A	
Maximum Forward Voltage at 3A	$V_F$	1		1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	1				300			$\mu\text{A}$	
Typical Junction Capacitance (Note 1)	$C_J$	75			50				pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50							$^\circ\text{C} / \text{W}$	
Maximum Reverse Recovery Time (Note 3)	$t_{rr}$	50				100				ns
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$	

### NOTES :

1. Measured at 1 MHz and applied reverse voltage of 4 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  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=0.25\text{A}$



# UF300G ~ UF3010G

## RATING AND CHARACTERISTIC CURVES

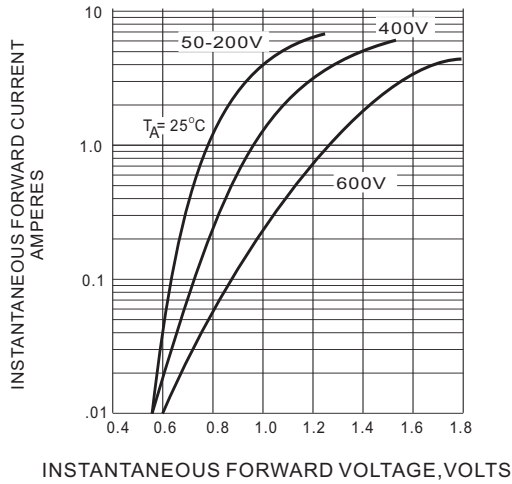


Fig. 1 FORWARD CHARACTERISTICS

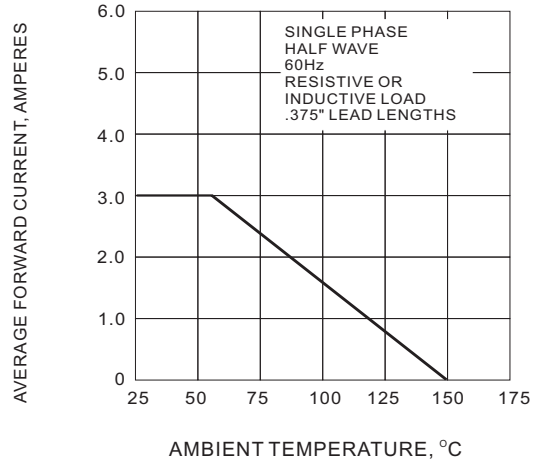


Fig. 2 FORWARD CURRENT DERATING CURVE

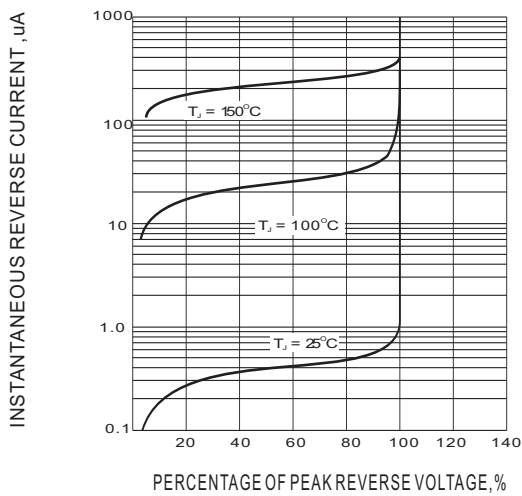


Fig. 3 TYPICAL REVERSE LEAKAGE CHARACTERISTICS

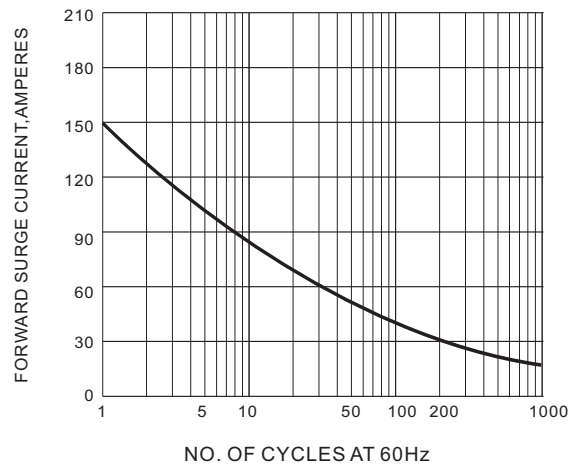


Fig. 4 PEAK FORWARD SURGE CURRENT



## UF300G ~ UF3010G

### Part No\_packing code\_Version

UF300G\_AY\_00001  
 UF300G\_AY\_10001  
 UF300G\_B0\_00001  
 UF300G\_B0\_10001  
 UF300G\_R2\_00001  
 UF300G\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



## UF300G ~ UF3010G

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[UF301G\\_B0\\_10001](#) [UF301G\\_R2\\_00001](#) [UF301G\\_R2\\_10001](#) [UF301G\\_AY\\_00001](#) [UF301G\\_AY\\_10001](#)  
[UF301G\\_B0\\_00001](#)