



FR301GU THRU FR307GU

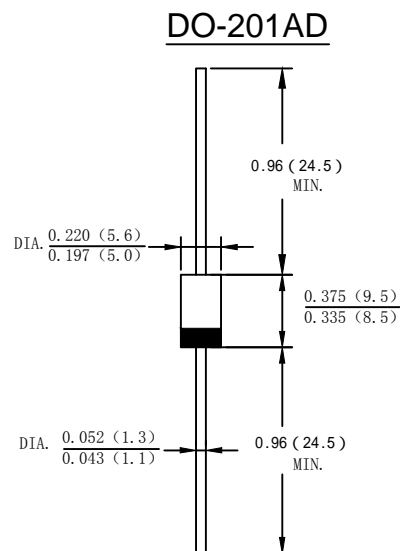
3.0 AMP Glass Fast Recovery Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version



Maximum Ratings and Electrical Characteristics

Rating 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	SYMBOL	FR301GU	FR302GU	FR303GU	FR304GU	FR305GU	FR306GU	FR307GU	Unit
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 Rectified Current.375"(9.5mm) lead length @ T _L =100°C	I _{F(AV)}	3.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	93.375							A ² s
Forward Voltage @IF=3.0A	V _{FM}	1.3							V
Peak Reverse Current @T _A =25°C	I _R	5.0							uA
At Rated DC Blocking Voltage @T _A =125°C		100							
Typical Junction Capacitance (Note 1)	C _J	60				25			pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	45							°C /W
Maximum Reverse Recovery Time(Note 2)	T _{rr}	150				250	500		ns
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

Note:1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$



FR301GU THRU FR307GU

3.0 AMP Glass Fast Recovery Rectifiers

Fig. 1 Forward Current Derating Curve

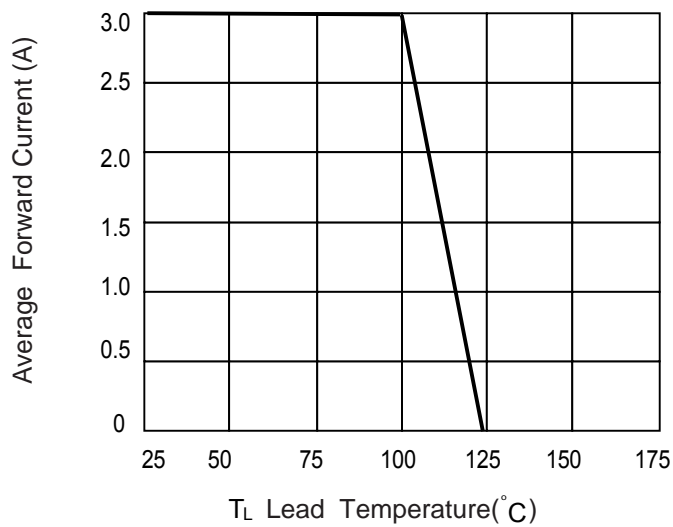


Fig. 2 Typ. Forward Characteristics

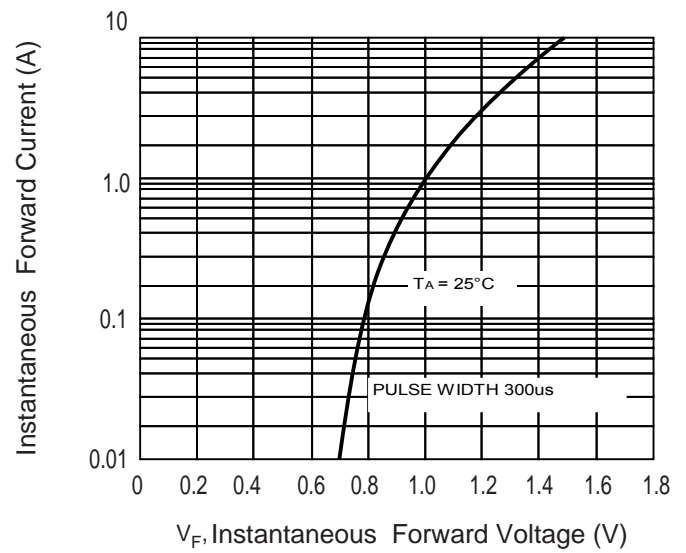


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

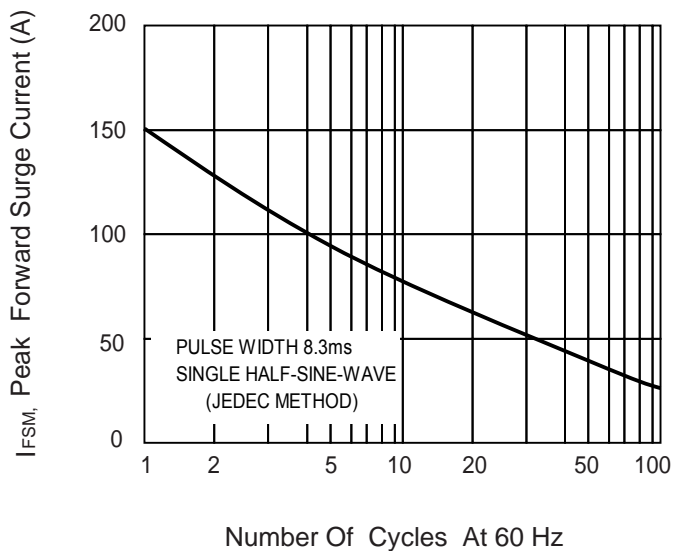
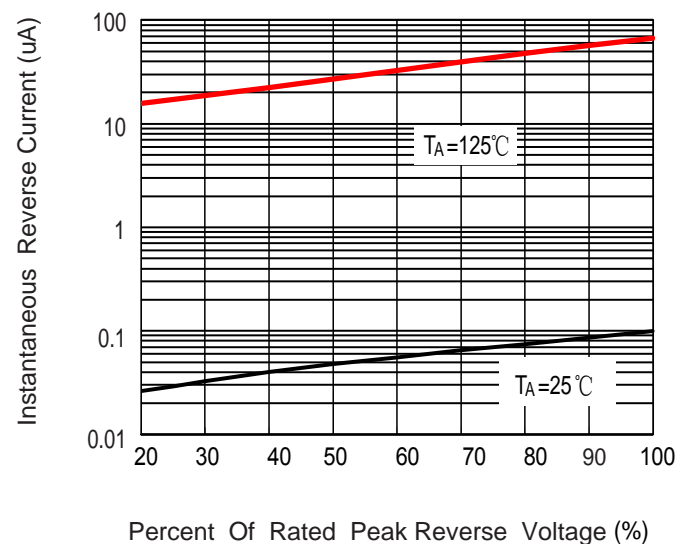


Fig.4 Typical Reverse Characteristics





Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUO reserves the right to make changes to this document and its products and specifications
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.

XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in 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 XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.