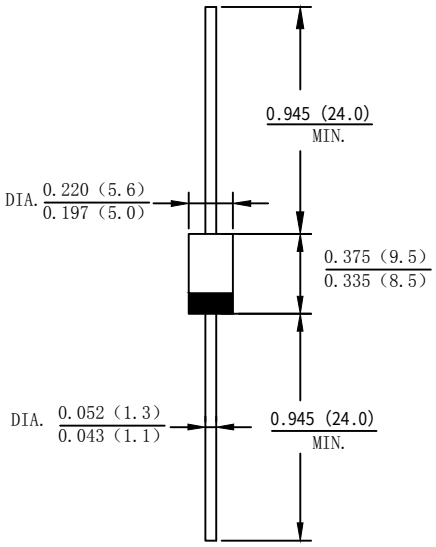
FR301G THRU FR307G

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

Case: DO-201AD



Dimensions in inches and (millimeters)

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℃ ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G	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℃	IF(AV)	3.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	64.84							A^2s
Forward Voltage @IF=3.0A	V_{FM}	1.3							V
Peak Reverse Current @T_A=25℃	I_R	5.0							uA
At Rated DC Blocking Voltage @T_A=125℃		100							
Typical Junction Capacitance (Note 1)	C_J	65				25			pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	45							℃/W
Maximum Reverse Recovery Time(Note 2)	Trr	150				250	500		ns
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

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

2.Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A

Fig. 1 Forward Current Derating Curve

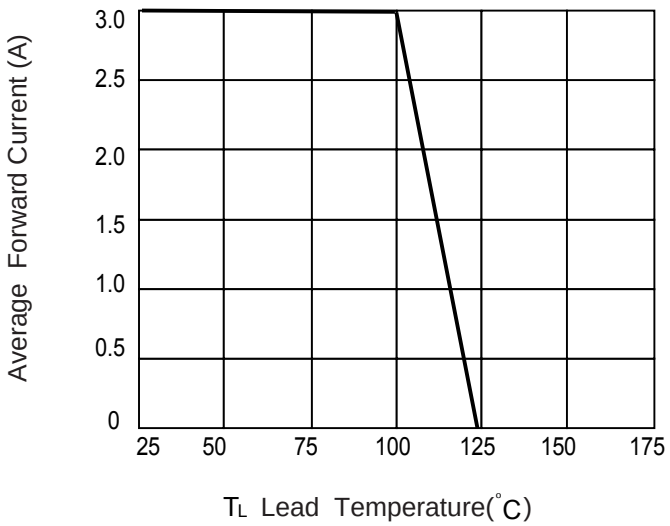


Fig. 2 Typ. Forward Characteristics

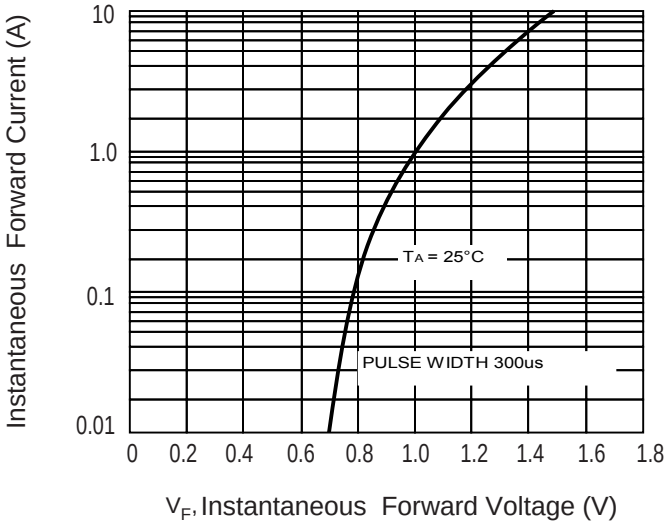


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

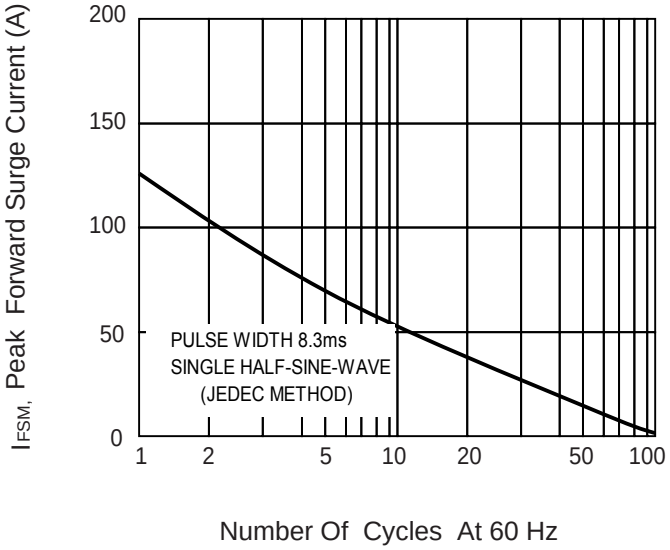
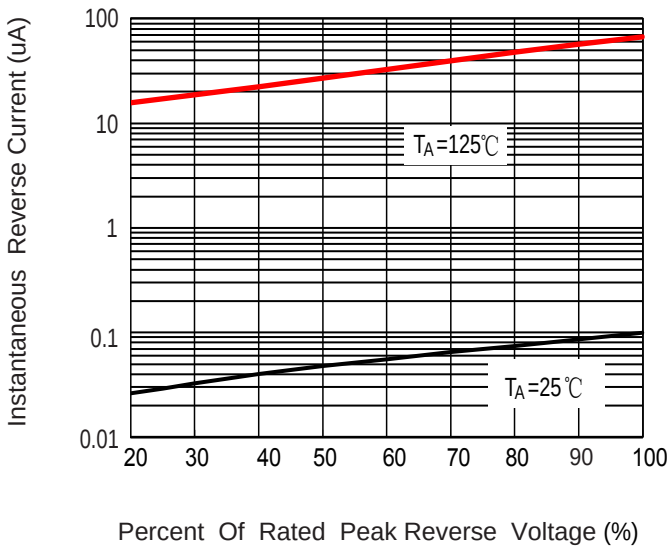


Fig.4 Typical Reverse Chracteristics



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