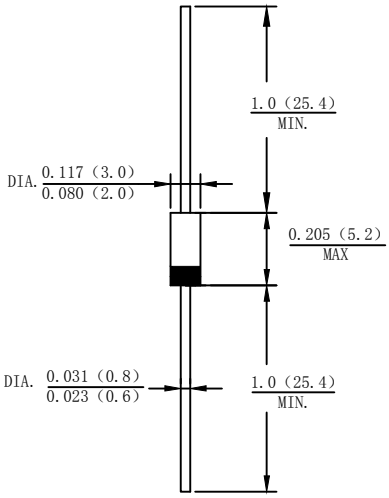
1N4001GUQ THRU 1N4007GUQ

1.0 AMP. Glass Passivated Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0
- AEC-Q101 qualified available

Case: DO-41



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic DO-41
- 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	1N4001 GUQ	1N4002 GUQ	1N4003 GUQ	1N4004 GUQ	1N4005 GUQ	1N4006 GUQ	1N4007 GUQ	Unit
	Code	1N4001GU	1N4002GU	1N4003GU	1N4004GU	1N4005GU	1N4006GU	1N4007GU	
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
Average Rectified Output Current @T_L =110 ℃	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	3.735							A^2s
Forward Voltage @IF=1.0A	V_{FM}	1.0							V
Peak Reverse Current @T_J=25℃	I_R	5.0							uA
At Rated DC Blocking Voltage @T_J =125℃		100							
Typical Junction Capacitance (Note 1)	C_J	8							pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	65							℃/W
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

Fig.1 Forward Current Derating Curve

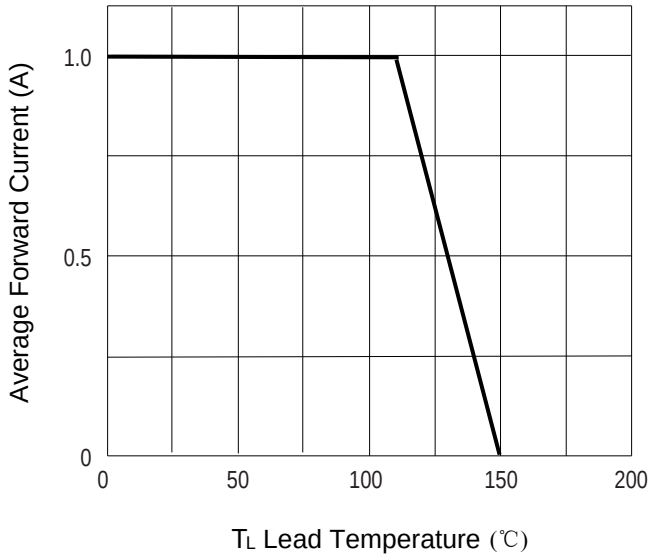


Fig.2 Typical Forward Characteristics

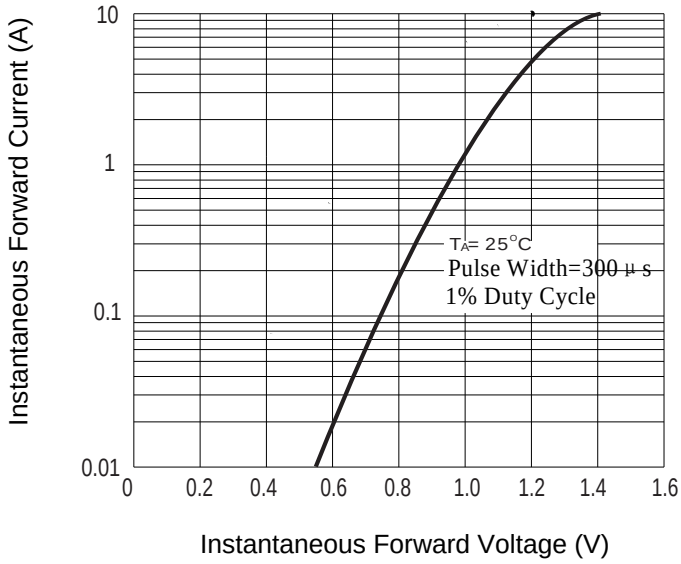


Fig.3 Maximum Non-repetitive Surge Current

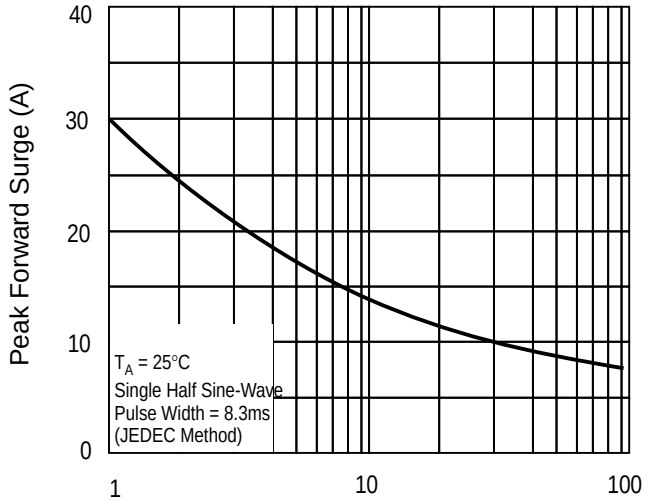
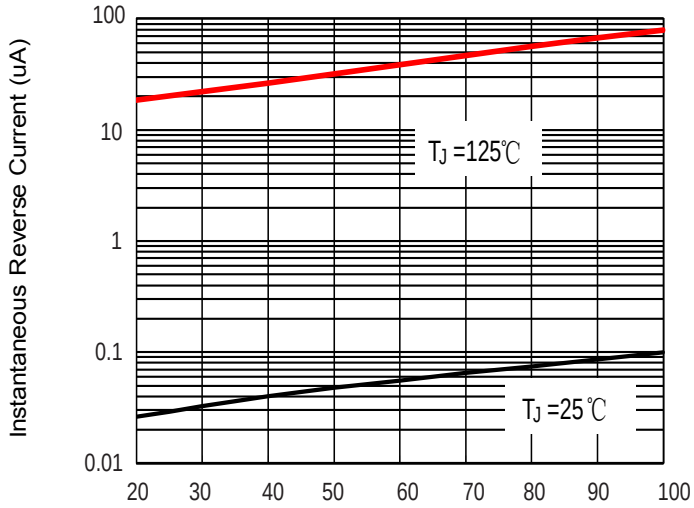


Fig. 4 Typical Reverse Characteristics (per element)



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