

# 1N4001G THRU 1N4007G, BY133G

## GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage – 50 to 1300 Volts

Forward Current – 1.0 Ampere

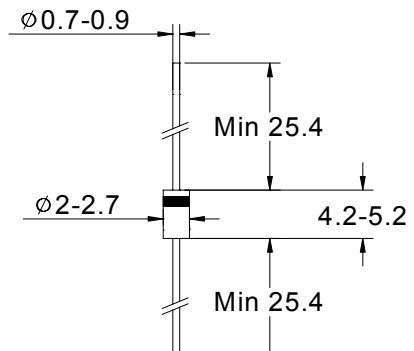
DO-41

### Features

- Low forward voltage drop
- High Surge current capability

### Mechanical Data

- **Case:** Molded plastic, DO-41
- **Lead:** Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any



Dimensions in mm

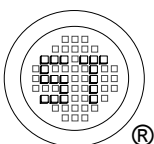
### Absolute Maximum Ratings and Characteristics

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%.

Parameter	Symbol	1N4001G	1N4002G	1N4003G	1N4004G	1N4005G	1N4006G	1N4007G	BY133G	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1300	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	910	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	1300	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length at $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1								A
Peak Forward Surge Current, 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	30								A
Maximum forward Voltage at 1A DC and 25 °C	$V_F$	1.1								V
Maximum Reverse Current $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$	$I_R$	5 50								$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_J$	15								pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	50								°C/W
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JL}$	25								°C/W
Operating and Storage Temperature range	$T_J, T_{stg}$	-55 to +150								°C

<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 volts.

<sup>2)</sup> Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length P.C.B. mounted.



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ISO/TS 16949 : 2002  
Certificate No. 05103



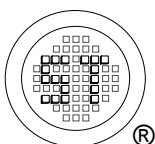
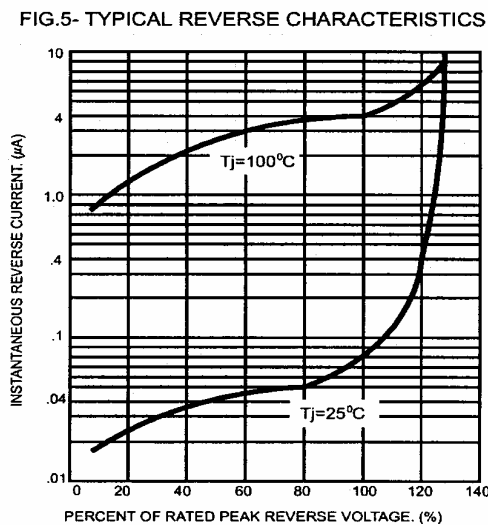
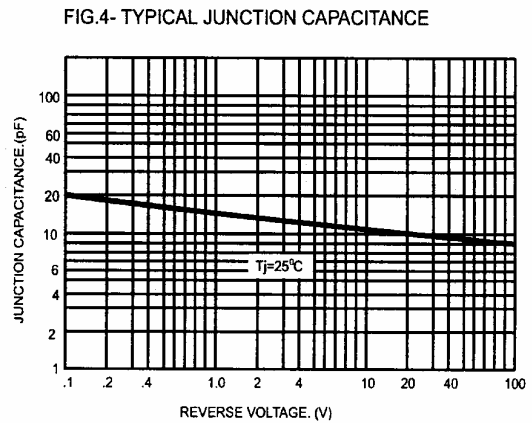
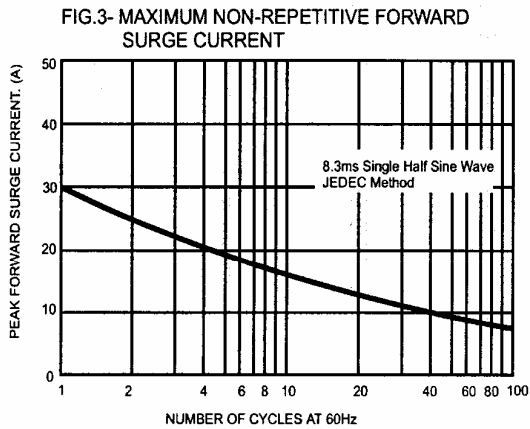
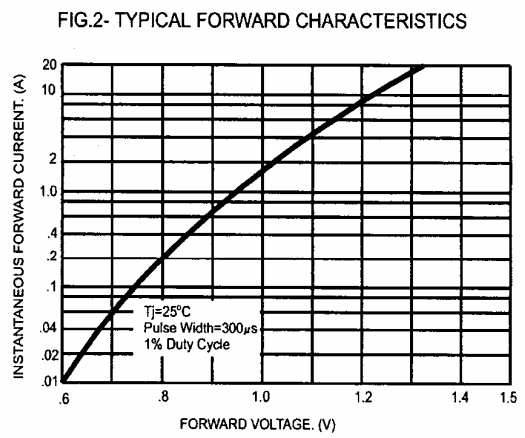
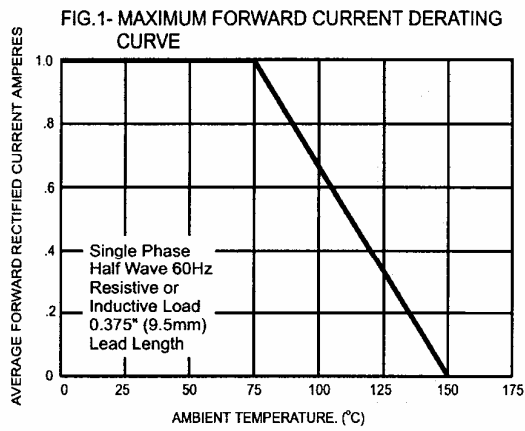
ISO 14001:2004  
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ISO 9001:2000  
Certificate No. 0506098

Dated : 07/12/2005 H

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ISO 14001:2004  
Certificate No. 71116



ISO 9001:2000  
Certificate No. 0506098

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