

# 1N4001G - 1N4007G BY133G

# GLASS PASSIVATED JUNCTION SILICON RECTIFIERS

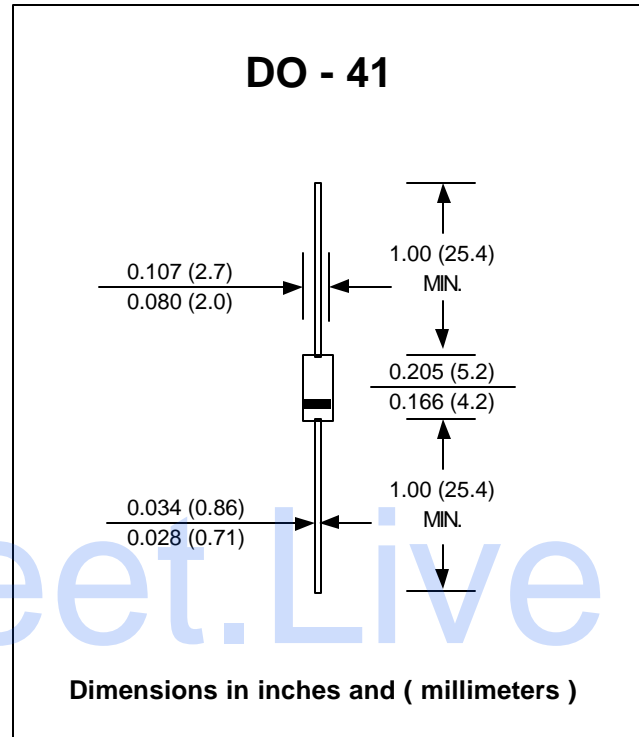
**PRV : 50 - 1000 Volts**  
**Io : 1.0 Ampere**

### FEATURES :

- \* Glass passivated chip
- \* High current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop

### MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.339 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

RATING	SYMBOL	1N	1N	1N	1N	1N	1N	1N	BY	UNIT
		4001G	4002G	4003G	4004G	4005G	4006G	4007G	133G	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1300	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	910	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	1300	Volts
Maximum Average Forward Current 0.375" (9.5mm) Lead Length $T_a = 75^\circ C$	$I_{F(AV)}$	1.0								Amp.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	30								Amps.
Maximum Forward Voltage at $I_F = 1.0$ Amp.	$V_F$	1.0								Volts
Maximum DC Reverse Current $T_a = 25^\circ C$ at rated DC Blocking Voltage $T_a = 100^\circ C$	$I_R$	5.0								$\mu A$
	$I_{R(H)}$	50								$\mu A$
Typical Junction Capacitance (Note1)	$C_J$	8								pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	45								$^\circ C/W$
Junction Temperature Range	$T_J$	- 65 to + 175								$^\circ C$
Storage Temperature Range	$T_{STG}$	- 65 to + 175								$^\circ C$

**Notes :** (1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC  
(2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

## RATING AND CHARACTERISTIC CURVES ( 1N4001G - BY133G )

