

1N4001G - 1N4007G BY133G

GLASS PASSIVATED JUNCTION SILICON RECTIFIERS

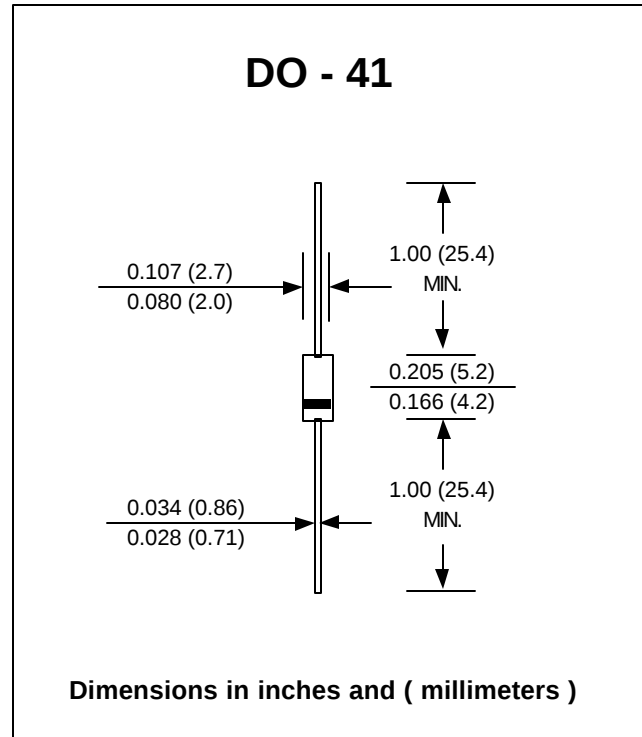
PRV : 50 - 1000 Volts
Io : 1.0 Ampere

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-O 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 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	BY 133G	UNIT
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 $T_a = 25^\circ C$	I_R	5.0								μA
at rated DC Blocking Voltage $T_a = 100^\circ C$	$I_{R(H)}$	50								μA
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.

UPDATE : MAY 27. 1998

RATING AND CHARACTERISTIC CURVES (1N4001G - BY133G)

