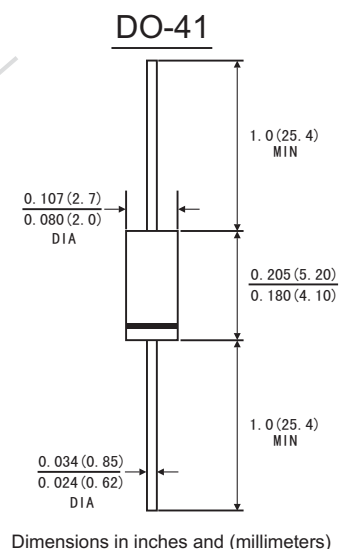


## FEATURES

- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- 1.0 Ampere operation at  $T_A=75^\circ\text{C}$  and  $55^\circ\text{C}$  with no thermal runaway
- Typical IR less than 0.1  $\mu\text{A}$
- High temperature soldering guaranteed:  $260^\circ\text{C}/10$  seconds at terminals
- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

## MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.012 ounce, 0.33 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified)

	Symbols	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	Unis
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) $T_A=75^\circ\text{C}$ )	$I_{FSM}$	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	$V_F$	1.0							Volts
Maximum Reverse current at rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	5.0							$\mu\text{A}$
	$T_A=150^\circ\text{C}$								
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	65.0							$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (Note 1)	$C_J$	10.0							Pf
Operating and Storage temperature Range	$T_J$ $T_{STG}$	-65 to +150							$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC.

2. Mount on Cu-Pad Size 5mm 5mm on P. C. B.

# RATINGS AND CHARACTERISTIC CURVES 1N4001G THRU 1N4007G

FIG.1-FORWARD CURRENT DERATING CURVE

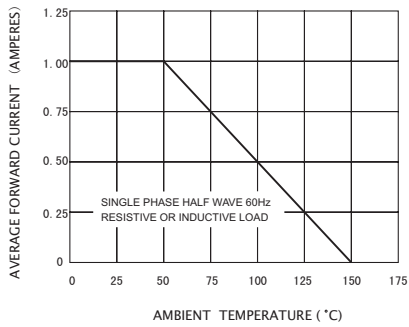


FIG.2-TYPICAL FORWARD CHARACTERISTICS

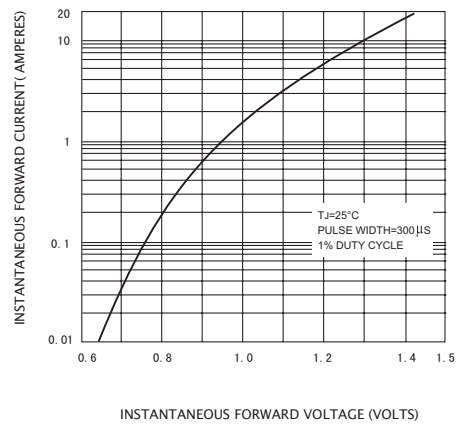


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

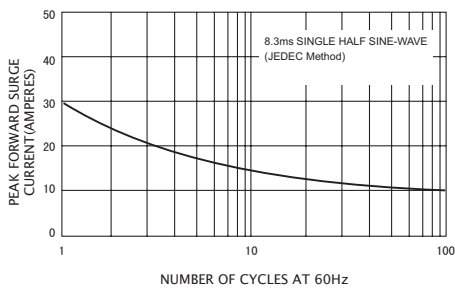


FIG.4-TYPICAL REVERSE CHARACTERISTICS

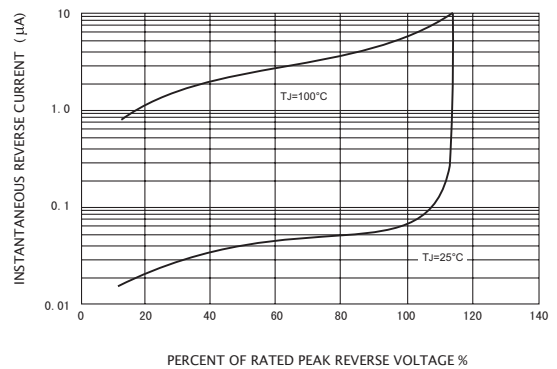


FIG.5-TYPICAL JUNCTION CAPACITANCE

