



AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

1N4001G THRU 1N4007G

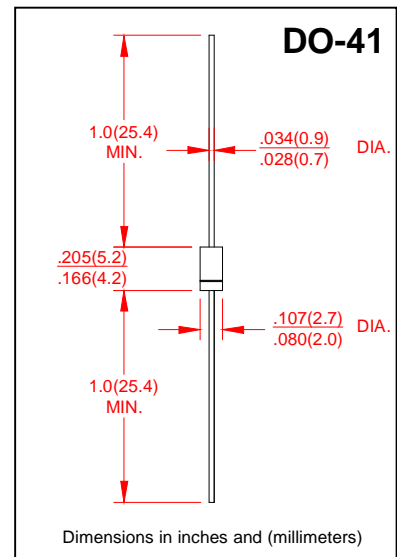
VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **1.0 Ampere**

FEATURES

- Glass passivated chip junction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
 260°C/10 secods, 0.375"(9.5mm) lead length at 5 lbs(2.3kg) tension

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.012ounce, 0.33 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	UNITS
Maximum Repetitive 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 (FIG.1) 0.375"(9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage at	$T_A = 25^\circ\text{C}$	5.0							μA
	$T_A = 125^\circ\text{C}$								
Maximum Full Load Reverse Current, full cycle Average 0.375(9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{R(AV)}$	30							μA
Typical Junction Capacitance (NOTE 1)	C_J	15							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	50							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at .375"(9.5mm) lead length, P.C. board mounted.



AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

1N4001G THRU 1N4007G

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.0 Ampere

RATING AND CHARACTERISTIC CURVES 1N4001G THRU 1N4007G

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

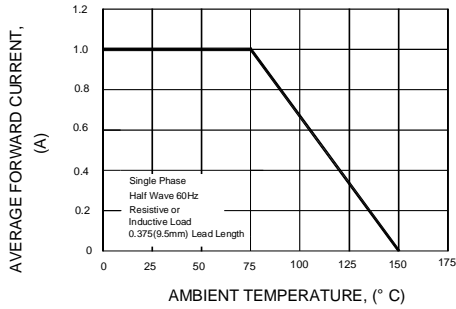


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

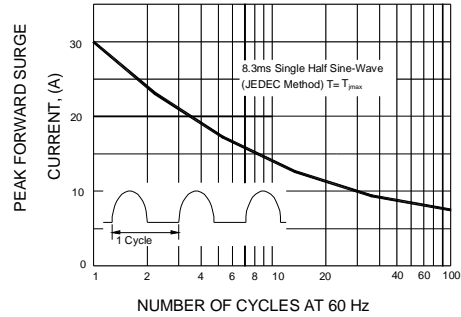


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

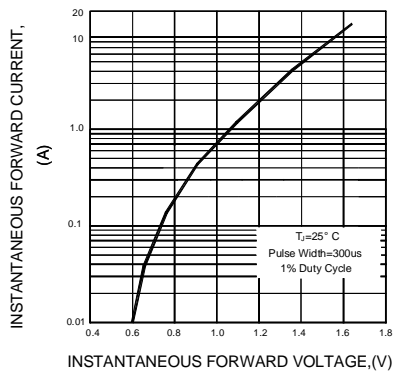


FIG.4-TYPICAL REVERSE CHARACTERISTICS

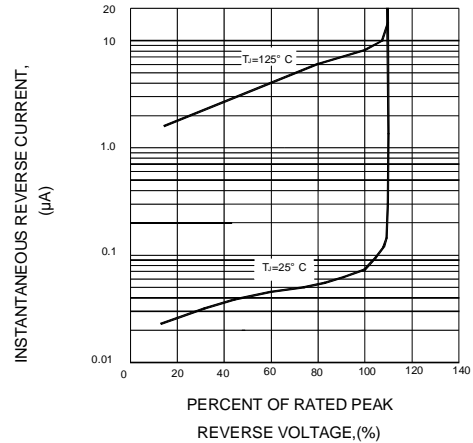


FIG.5-TYPICAL JUNCTION CAPACITANCE

