



PINGWEI ENTERPRISE

# 1N4001S THRU 1N4007S

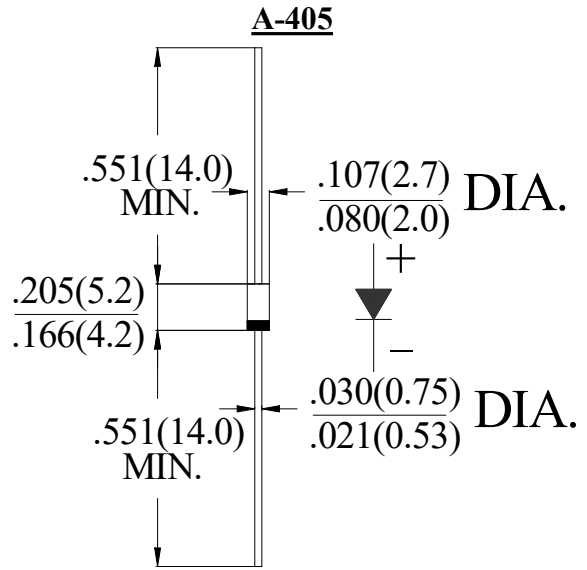
## 1.0AMP . SILICON RECTIFIERS

### FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed  
260°C /10sec/ 0.375" lead length at 5 lbs tension
- . Φ0.6mm leads

### MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any
- . Weight: 0.261gram(approximately)



Dimensions in inches and (millimeters)

### 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%

Type Number	SYM BOL	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S	1N 4007S	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_L = 90^\circ C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30.0							A
Maximum Forward Voltage at 1.0A DC	$V_F$	1.0							V
Maximum Forward Voltage at 3.0A DC	$V_F$	1.3							V
Maximum DC Reverse Current @ $T_J = 25^\circ C$ at rated DC blocking voltage @ $T_J = 100^\circ C$	$I_R$	5.0 100.0							$\mu A$
Typical Junction Capacitance (Note 1)	$C_J$	8							pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	75							$^\circ C/W$
	$R_{(JL)}$	15							
	$R_{(JC)}$	10							
Storage Temperature	$T_{STG}$	-55 to +150							$^\circ C$
Operation Junction Temperature	$T_J$	-55 to +150							$^\circ C$

#### Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient, Lead and Case at 0.375" (9.5mm) lead length, vertical P.C.Board Mounted.

# RATING AND CHARACTERISTIC CURVES (1N4001S THRU 1N4007S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

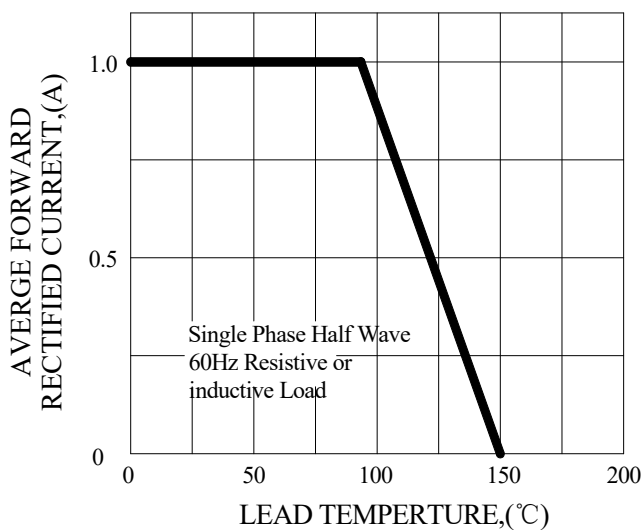


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

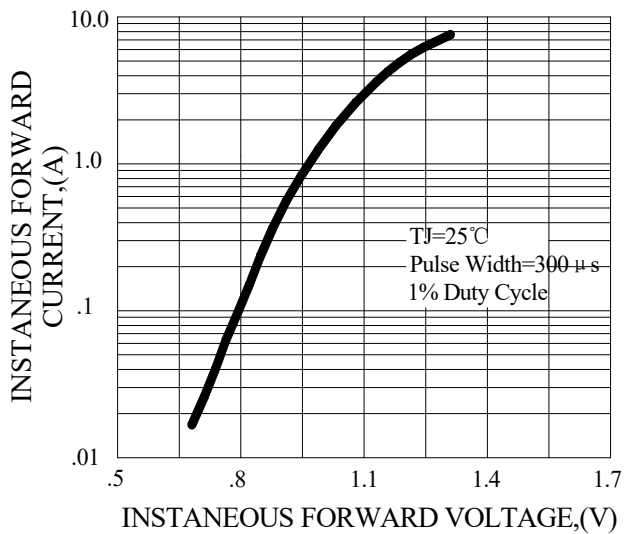


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

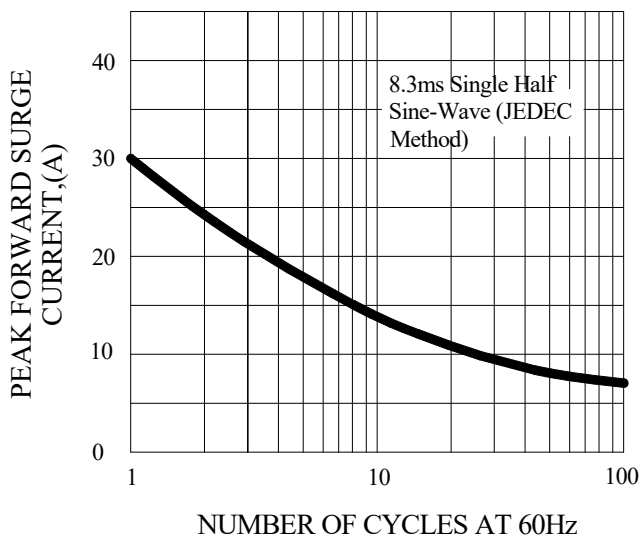


FIG.4-TYPICAL REVERSE CHARACTERISTICS

