

# PG4001S THRU PG4007S

## GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER VOLTAGE - 50 to 1000 Volts CURRENT - 1.0 Ampere

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction version of PG4001S thru PG4007S in A-405 package
- 1 ampere operation at  $T_A=75\text{ }^{\circ}\text{C}$  with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228

### MECHANICAL DATA

Case: Molded plastic, JEDEC A-405

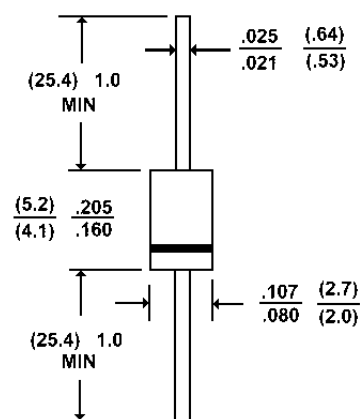
Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color Band denotes cathode

Mounting Position: Any

Weight: 0.008 ounce, 0.22 gram

### A-405



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Single phase, half wave, 60 Hz, resistive or inductive load.

	PG4001S	PG4002S	PG4003S	PG4004S	PG4005S	PG4006S	PG4007S	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Forward Voltage at 1.0A	1.1							V
Maximum Average Forward Rectified Current .375" lead length at $T_A=75\text{ }^{\circ}\text{C}$	1.0							A
Peak Forward Surge Current, $I_{FM}$ (surge): 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	30							A
Maximum Full Load Reverse Current, Full Cycle Average at $T_A=75\text{ }^{\circ}\text{C}$	30							Eg A
Maximum DC Reverse Current at $T_A=25\text{ }^{\circ}\text{C}$	5.0							Eg A
At Rated DC Blocking Voltage $T_A=100\text{ }^{\circ}\text{C}$	50							Eg A
Typical Junction capacitance (Note 1)	15							pF
Typical Thermal Resistance R $\theta$ KJA(Note 2)	50							$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	-55 to +150							$^{\circ}\text{C}$

### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

2. Thermal Resistance Junction to Ambient

\* JEDEC Registered Value

# RATING AND CHARACTERISTIC CURVES

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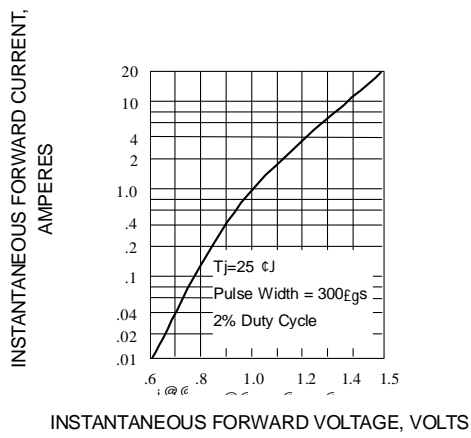


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

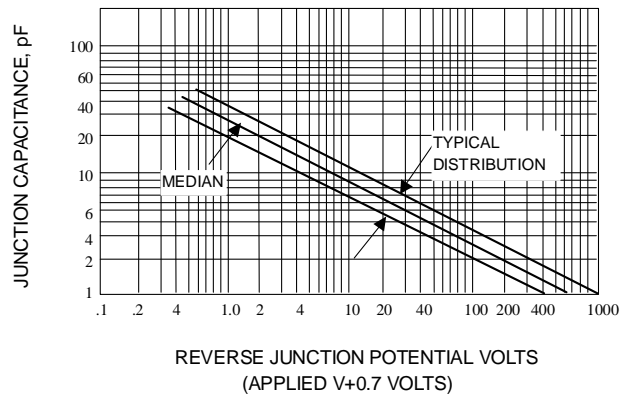


Fig. 2-JUNCTION CAPACITANCE

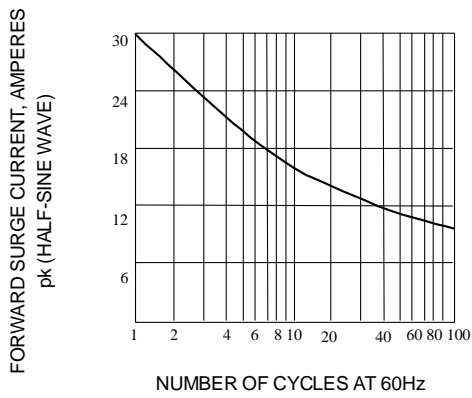


Fig. 3-PEAK FORWARD SURGE CURRENT

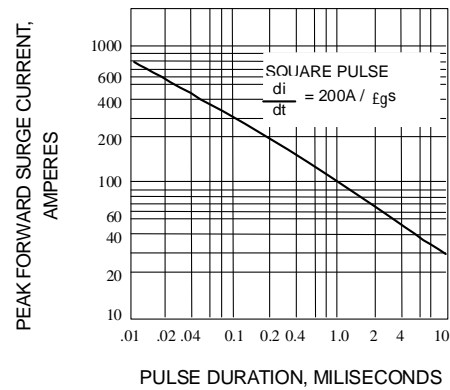


Fig. 4-PEAK FORWARD SURGE CURRENT

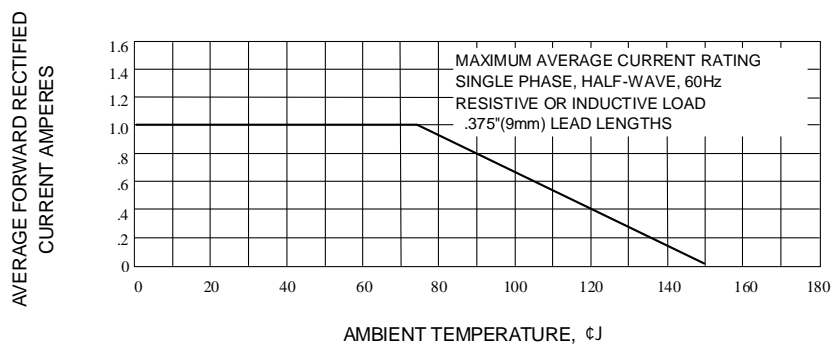


Fig. 5-FORWARD DERATING CURVE