



TE 4001S THRU TE 4007S

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

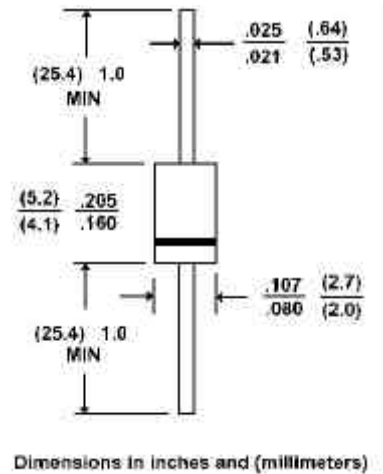
FEATURES

- 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 $T_A=75^\circ\text{C}$ 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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

	TE 4001S	TE 4001S	TE 4003S	TE 4004S	TE 4005S	TE 4006S	TE 4007S	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 $T_A=75^\circ\text{C}$	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 $T_A=75^\circ\text{C}$	30							μgA
Maximum DC Reverse Current at $T_A=25^\circ\text{C}$	5.0							μgA
At Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	50							μgA
Typical Junction capacitance (Note 1)	15							pF
Typical Thermal Resistance $R_{\theta JA}$ (Note 2)	50							$^\circ\text{C/W}$
Operating and Storage Temperature Range	-55 to +150							$^\circ\text{C}$

NOTES:

- Measured at 1 MHz and applied reverse voltage of 4.0 VDC
- Thermal Resistance Junction to Ambient

* JEDEC Registered Value

RATING AND CHARACTERISTIC CURVES
TE 4001S THRU TE 4007S

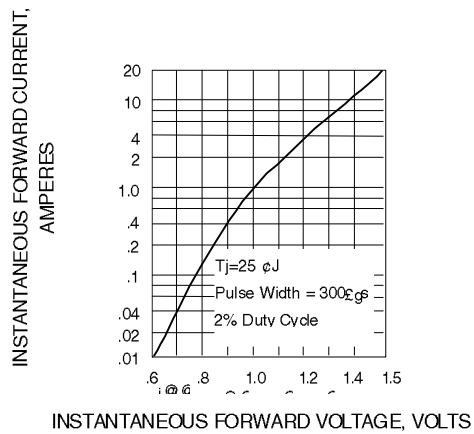


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

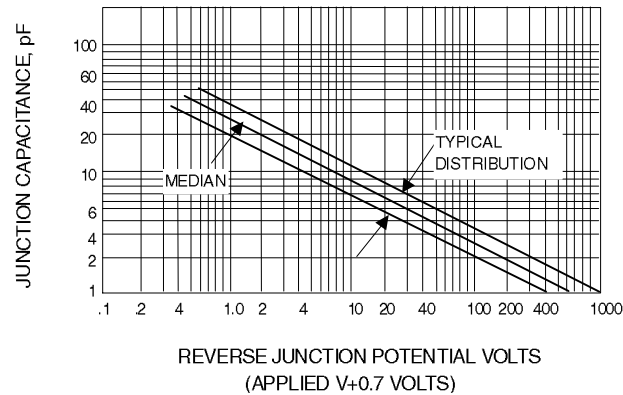


Fig. 2-JUNCTION CAPACITANCE

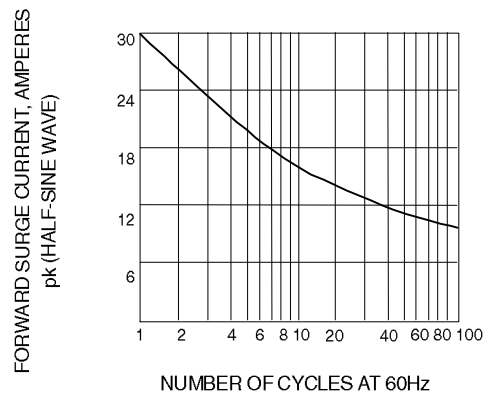


Fig. 3-PEAK FORWARD SURGE CURRENT

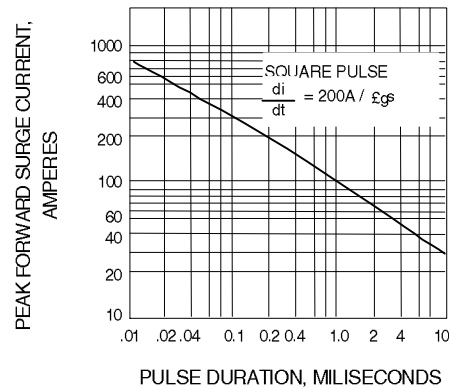


Fig. 4-PEAK FORWARD SURGE CURRENT

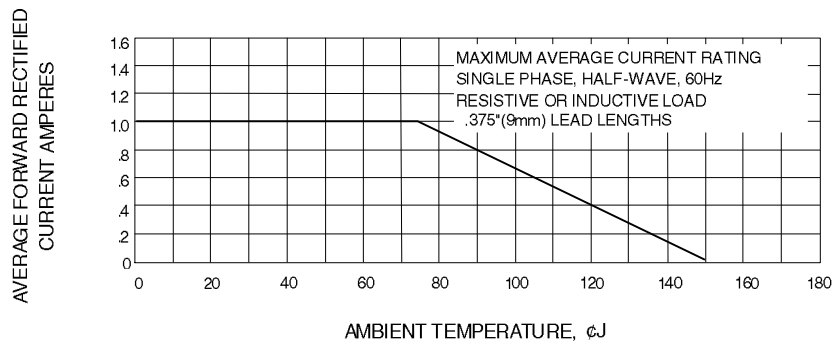


Fig. 5-FORWARD DERATING CURVE