

## PG5391 THRU PG5399

## GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction in DO-15 package
- 1.5 ampere operation at  $T_A=55^{\circ}\text{C}$  with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228

## MECHANICAL DATA

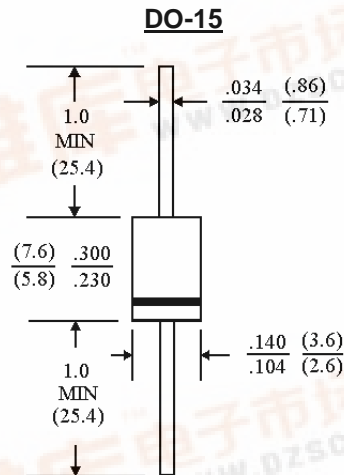
Case: Molded plastic, DO-15

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

Polarity: Color Band denotes cathode

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram



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.

For capacitive load, derate current by 20%

	PG5391	PG5392	PG5393	PG5394	PG5395	PG5396	PG5397	PG5398	PG5399	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_A=55^{\circ}\text{C}$	1.5									A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	50									A
Maximum Forward Voltage at 1.5A	1.4									V
Maximum Reverse Current $T_A=25^{\circ}\text{C}$	5.0									$\mu\text{g A}$
Rated DC Blocking Voltage $T_A=100^{\circ}\text{C}$	50									$\mu\text{g A}$
Typical Junction capacitance (Note 1)	25									pF
Typical Thermal Resistance R <sub>θJA</sub> (Note 2)	45.0									$^{\circ}\text{C/W}$
Operating and Storage Temperature Range $T_A$	-55 to +150									$^{\circ}\text{C}$

## NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length P.C.B mounted

## RATING AND CHARACTERISTIC CURVES

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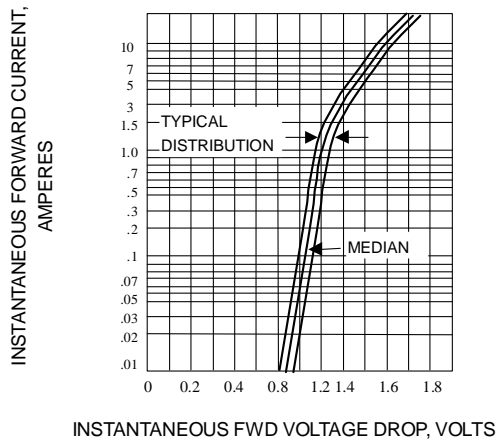


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

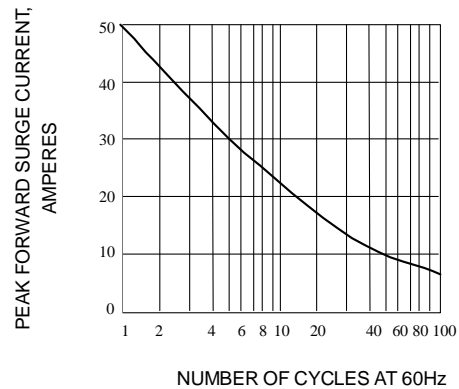


Fig. 2-PEAK FORWARD SURGE CURRENT

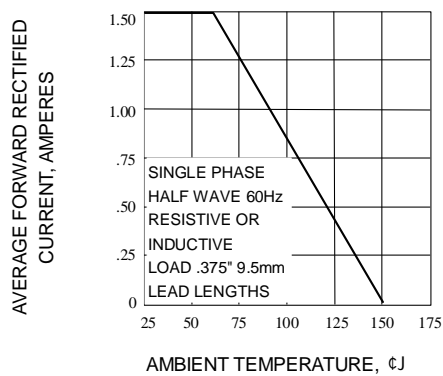


Fig. 3-FORWARD CURRENT DERATING CURVE

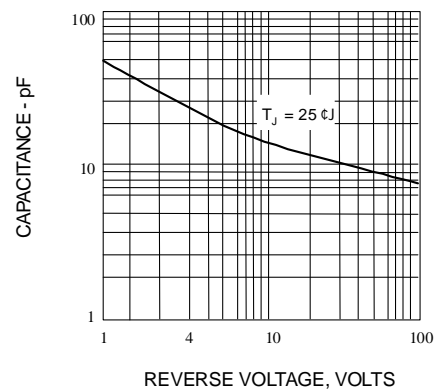


Fig. 4-TYPICAL JUNCTION CAPACITANCE