



# DATA SHEET

## PG150R~PG1510R

### GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIERS

**VOLTAGE** 50 to 1000 Volts **CURRENT** 1.5 Amperes

**DO-15**

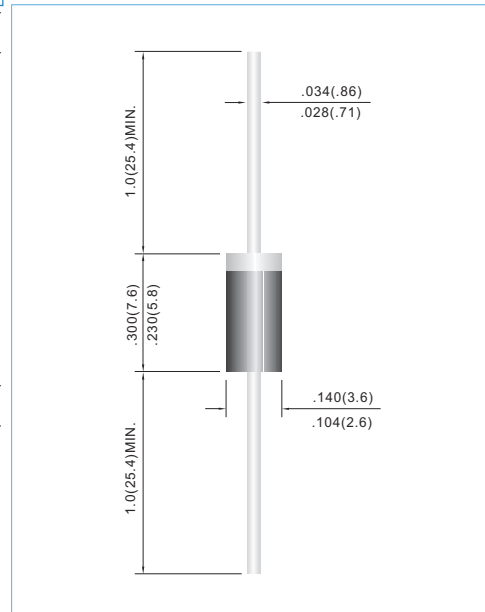
Unit: inch(mm)

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Glass passivated junction
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: Molded plastic, DO-15  
 Terminals: Axial leads, solderable to MIL-STD-202G, Method 208  
 Polarity: Color Band denotes cathode end  
 Mounting Position: Any  
 Weight: 0.015 ounce, 0.4 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

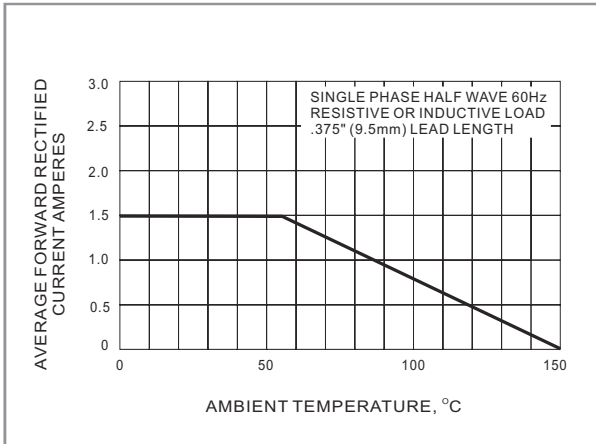
Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	PG150R	PG151R	PG152R	PG154R	PG156R	PG158R	PG1510R	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	I <sub>AV</sub>	1.5							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	50							A
Maximum Forward Voltage at 1.5A	V <sub>F</sub>	1.3							V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I <sub>R</sub>	5.0 150							uA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	150				250	500		ns
Typical Junction capacitance (Note 2)	C <sub>J</sub>	35							pF
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	45							°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 TO +150							°C

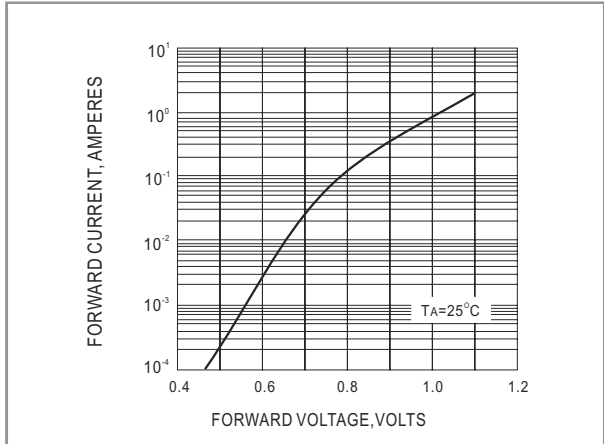
NOTES: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=.25A  
 2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC  
 3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted



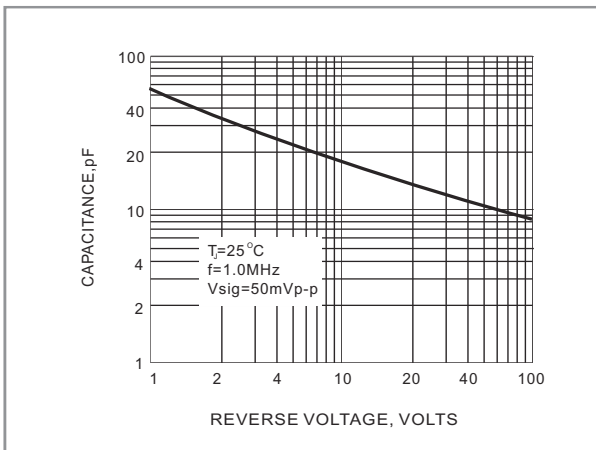
**RATING AND CHARACTERISTIC CURVES**



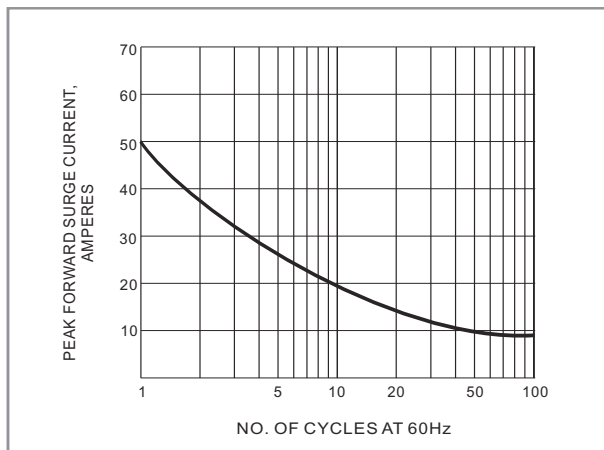
**FIG.1 FORWARD CURRENT DERATING CURVE**



**FIG.2 TYPICAL FORWARD CHARACTERISTICS**



**FIG.3 TYPICAL JUNCTION CAPACITANCE**



**FIG.4 MAX NON-REPETITIVE SURGE CURRENT**