



DATA SHEET

PG150R~PG1510R

GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIERS

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

DO-15

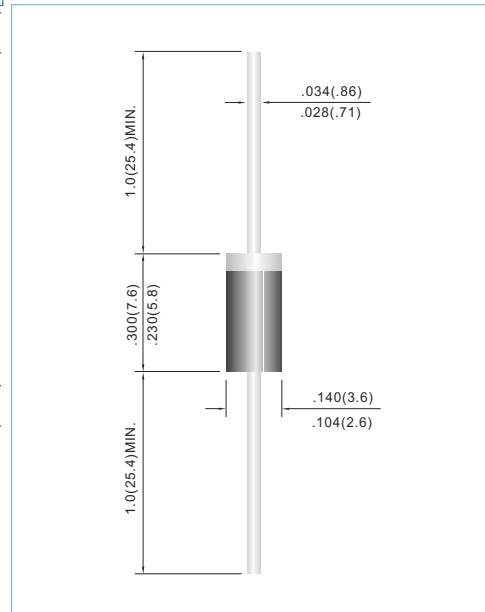
Unit: inch(mm)

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 _{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 Current .375"(9.5mm) lead length at TA=55°C | I _{AV} | 1.5 | | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | I _{FSM} | 50 | | | | | | | A |
| Maximum Forward Voltage at 1.5A | V _F | 1.3 | | | | | | | V |
| Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C | I _R | 5.0 150 | | | | | | | uA |
| Maximum Reverse Recovery Time (Note 1) | T _{RR} | 150 | | | | 250 | 500 | | ns |
| Typical Junction capacitance (Note 2) | C _J | 35 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | R _{θJA} | 45 | | | | | | | °C / W |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 TO +150 | | | | | | | °C |

NOTES: 1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{rr}=.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

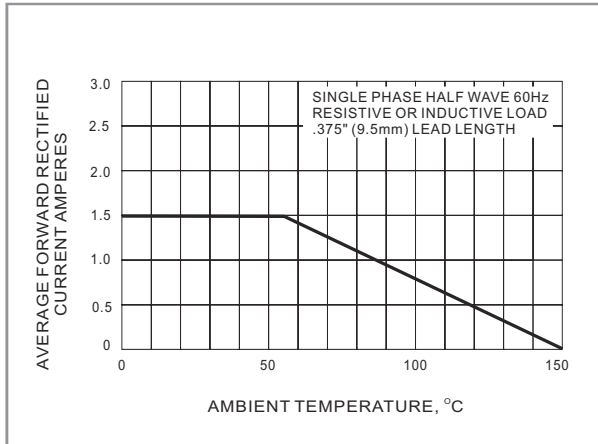


FIG.1 FORWARD CURRENT DERATING CURVE

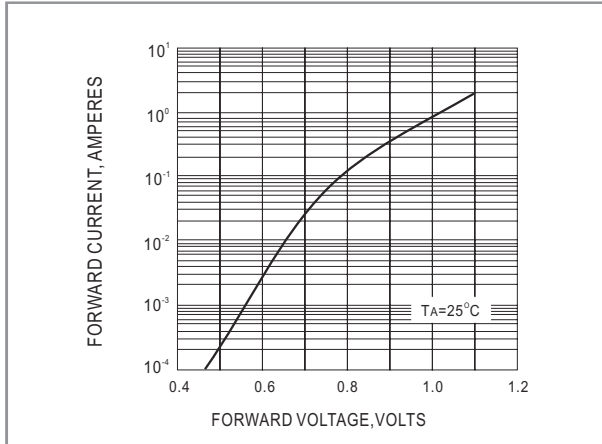


FIG.2 TYPICAL FORWARD CHARACTERISTICS

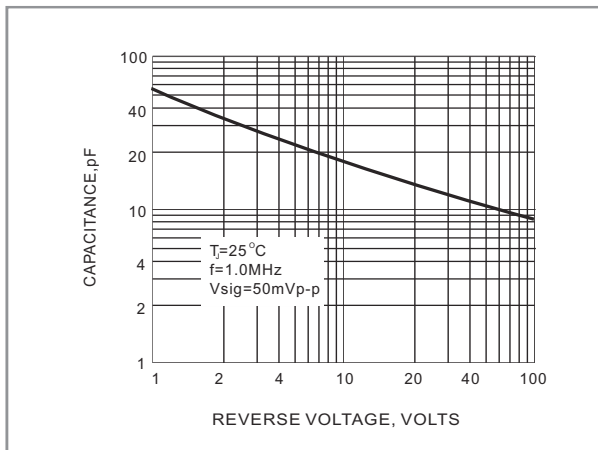


FIG.3 TYPICAL JUNCTION CAPACITANCE

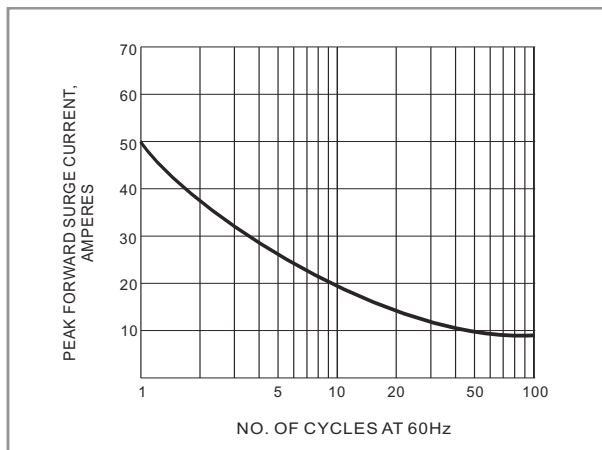


FIG.4 MAX NON-REPETITIVE SURGE CURRENT