



# DATA SHEET

## PG300R~PG308R

### GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIERS

**VOLTAGE** 50 to 800 Volts **CURRENT** 3.0 Amperes

DO-201AD

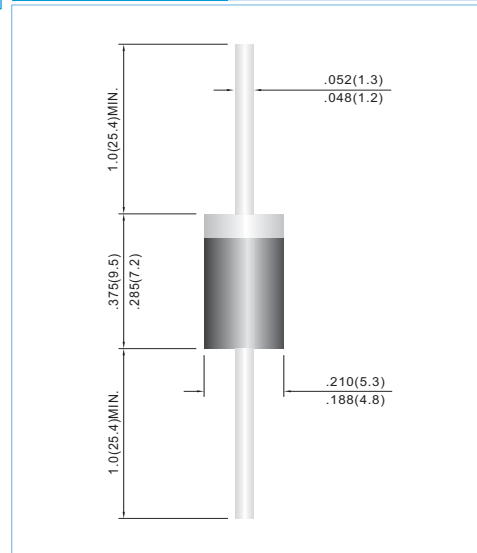
Unit: inch(mm)

#### 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 can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: Molded plastic, DO-201AD  
 Terminals: Axial leads, solderable to MIL-STD-202G, Method 208  
 Polarity: Color Band denotes cathode end  
 Mounting Position: Any  
 Weight: 0.04 ounce, 1.1 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

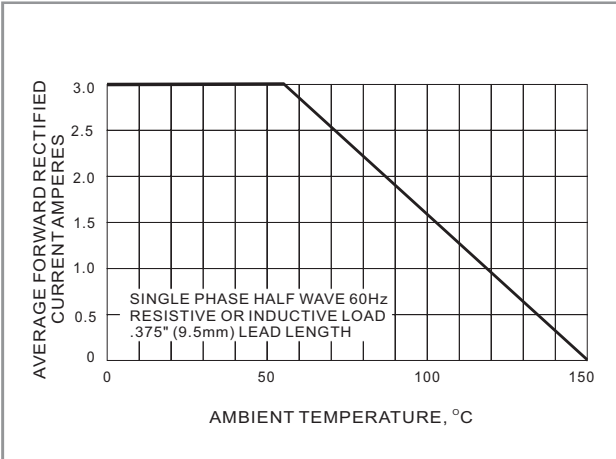
Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	PG 300R	PG 301R	PG 302R	PG 304R	PG 306R	PG 308R	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	V
Maximum Average Forward Current .375" (9.5mm) lead length at $T_A=55^\circ C$	$I_{AV}$	3.0						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	125						A
Maximum Forward Voltage at 3.0A	$V_F$	1.3						V
Maximum DC Reverse Current at $T_A=25^\circ C$ Rated DC Blocking Voltage $T_A=100^\circ C$	$I_R$	5.0 300						$\mu A$
Maximum Reverse Recovery Time (Note 1)	$T_{RR}$	150				250	500	ns
Typical Junction capacitance (Note 2)	$C_J$	60						pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	22						$^\circ C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 TO +150						$^\circ C$

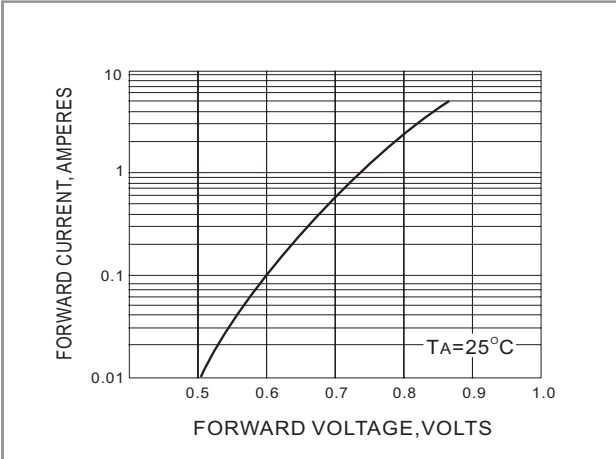
- NOTES: 1. Reverse Recovery Test Conditions:  $I_F=.5A$ ,  $I_R=1A$ ,  $I_{rr}=.25A$   
 2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC  
 3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted



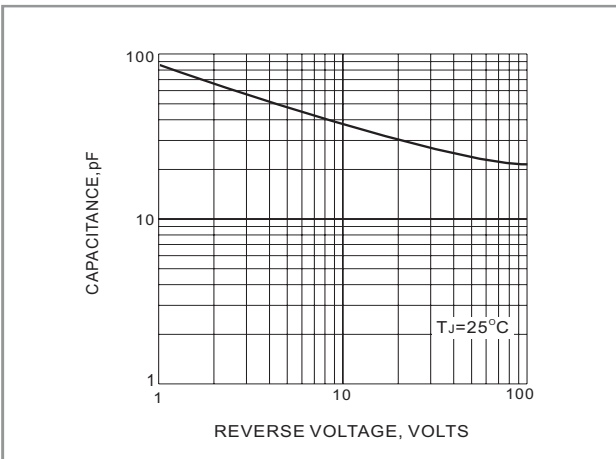
**RATING AND CHARACTERISTIC CURVES**



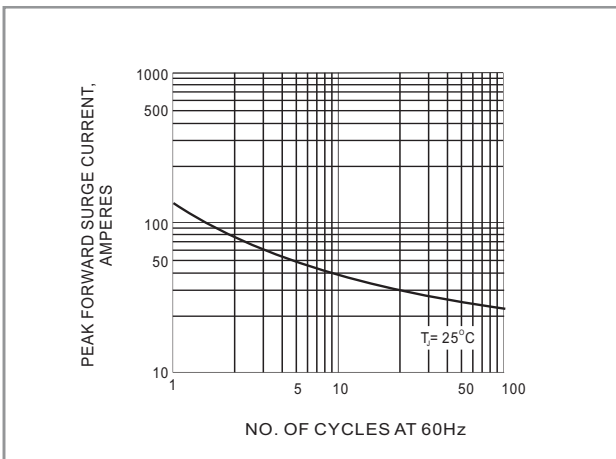
**FIG. 1 FORWARD CURRENT DERATING CURVE**



**FIG. 2 TYPICAL FORWARD CHARACTERISTIC**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**



**FIG. 4 PEAK FORWARD SURGE CURRENT**