



DATA SHEET

PG300R~PG308R

GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIERS

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

DO-201AD

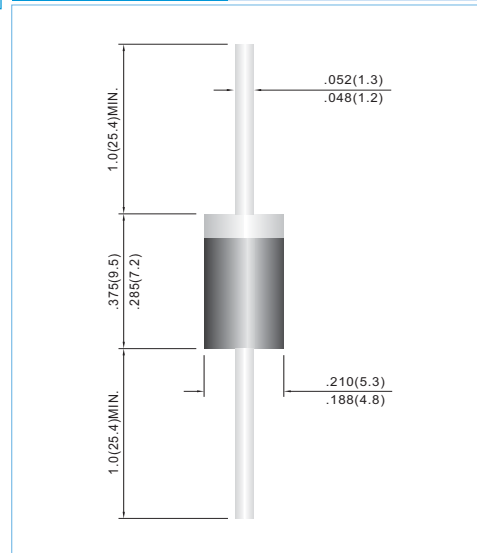
Unit: inch(mm)

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						μA
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

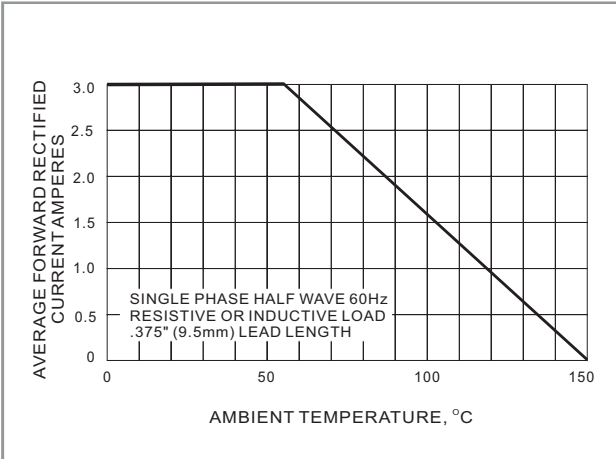


FIG. 1 FORWARD CURRENT DERATING CURVE

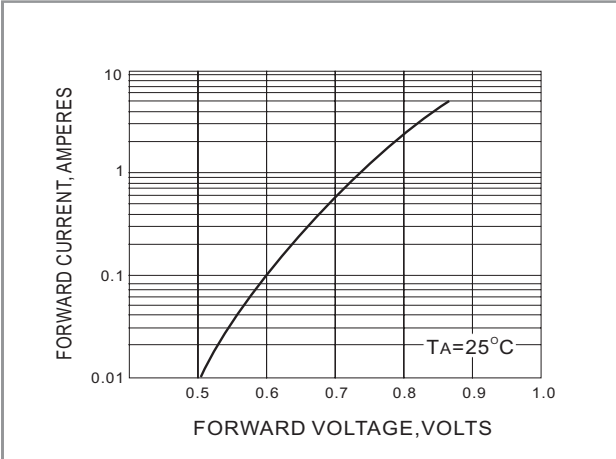


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

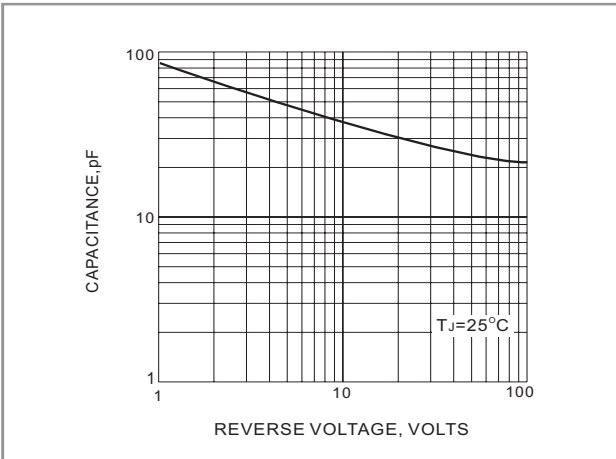


FIG. 3 TYPICAL JUNCTION CAPACITANCE

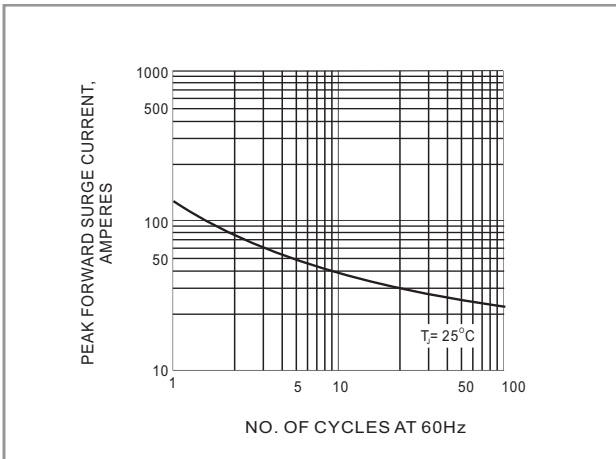


FIG. 4 PEAK FORWARD SURGE CURRENT