

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

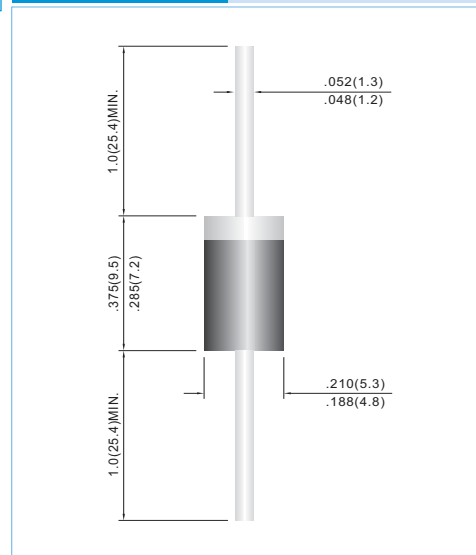
Case: Molded plastic, DO-201AD

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 TA=55°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 TA=25°C Rated DC Blocking Voltage TA=100°C	I_R	5.0 300						uA
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						°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

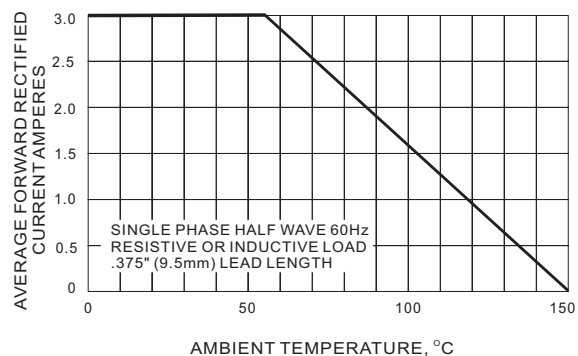


FIG.1 FORWARD CURRENT DERATING CURVE

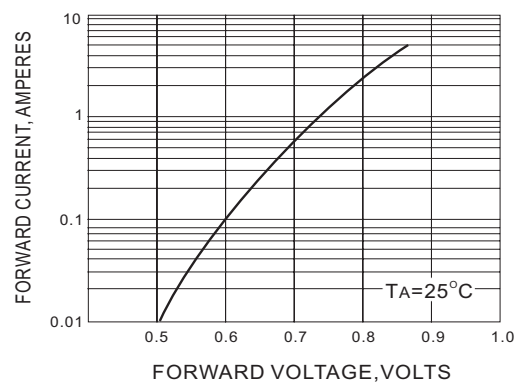


FIG.2 TYPICAL FORWARD CHARACTERISTIC

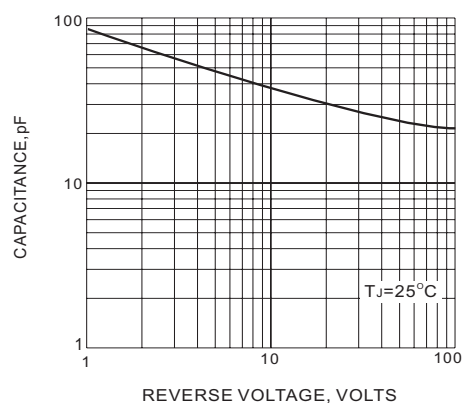


FIG.3 TYPICAL JUNCTION CAPACITANCE

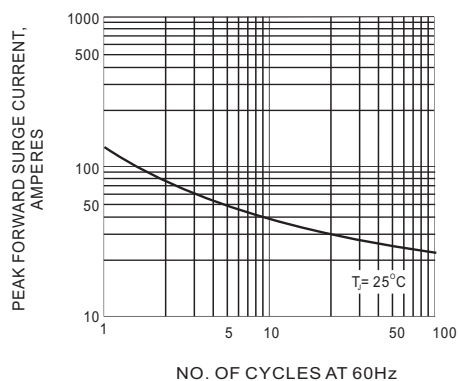


FIG.4 PEAK FORWARD SURGE CURRENT