



# PG600R~PG606R

## GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIERS

**VOLTAGE** 50 to 600 Volts **CURRENT** 6.0 Amperes

**P-600**

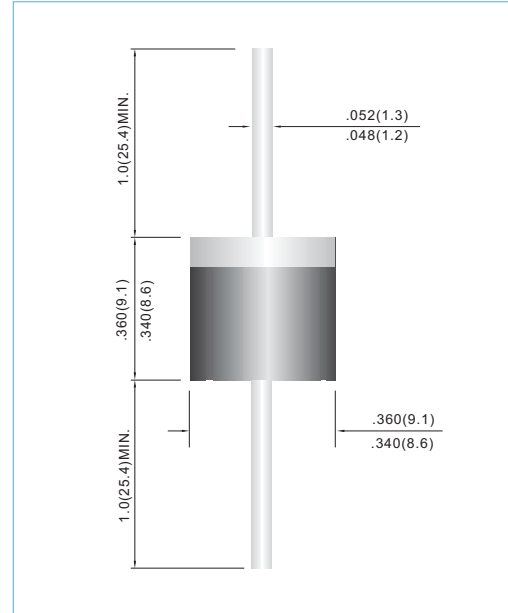
Unit: inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Glass passivated junction in P600 package.
- Exceeds environmental standards of MIL-S-19500/228
- 6 ampere operation at  $T_A=60^{\circ}\text{C}$  with no thermal runaway.
- Fast switching for high efficiency.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded plastic, P600
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.0719 ounce, 2.04 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	PG600R	PG601R	PG602R	PG604R	PG606R	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	V
Maximum Average Forward Current .375" (9.5mm) lead length at $T_A=60^{\circ}\text{C}$	$I_{F(AV)}$	6					A
Peak Forward Surge Current : IFM (surge): 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	250					A
Maximum Forward Voltage at 6.0A	$V_F$	1.3					V
Maximum Full Load Reverse Current Full Cycle Average at $T_J=25^{\circ}\text{C}$ Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=100^{\circ}\text{C}$	$I_R$	1.0 200					$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	150				250	ns
Typical Junction capacitance (Note 2)	$C_J$	300					pF
Typical Junction Resistance at .375" (9.5mm) lead length	$R_{\theta JA}$	10					$^{\circ}\text{C} / \text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-50 to +150					$^{\circ}\text{C}$

NOTES: 1. Reverse Recovery Test Conditions:  $I_F=5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=25\text{A}$   
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC



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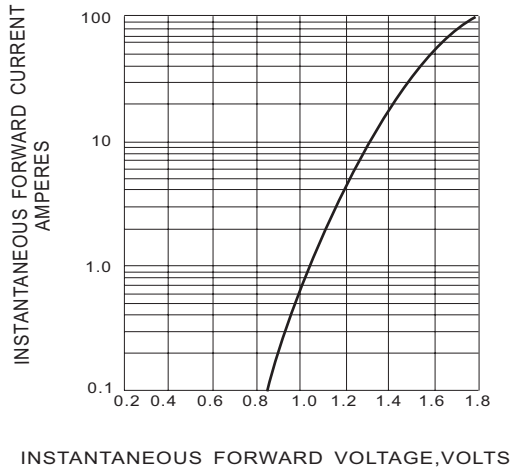


Fig.1-FORWARD CHARACTERISTICS

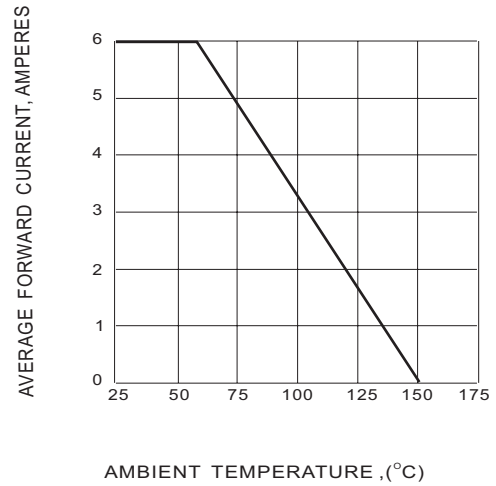


Fig.2-FORWARD CURRENT DERATING CURVE

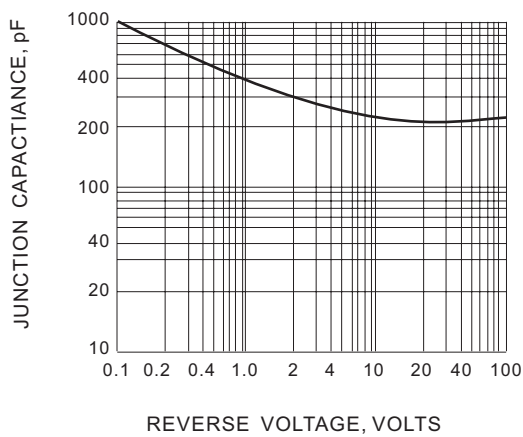


Fig.3-TYPICAL JUNCTION CAPACITANCE

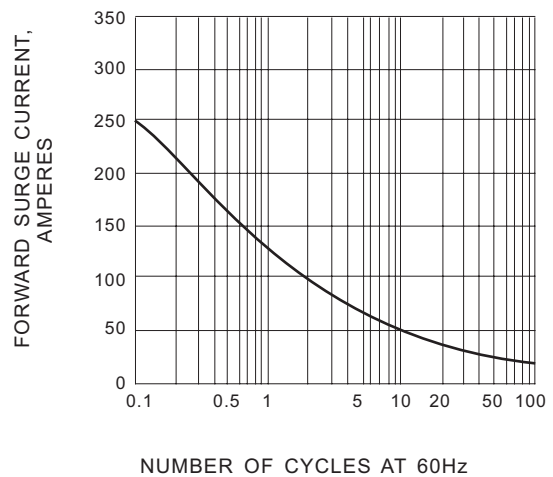


Fig.4-PEAK FORWARD SURGE CURRENT

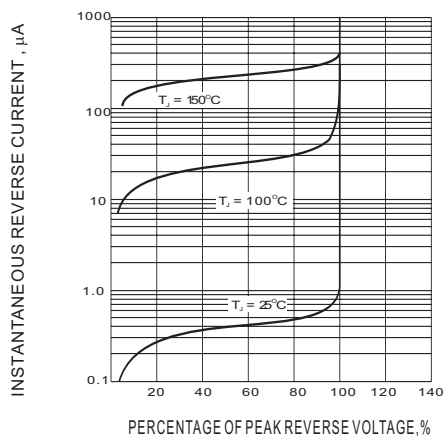


Fig.5-TYPICAL REVERSE CHARACTERISTIC



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## Part No\_packing code\_Version

- PG600R\_AY\_00001
- PG600R\_AY\_10001
- PG600R\_B0\_00001
- PG600R\_B0\_10001
- PG600R\_R2\_00001
- PG600R\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code XX				Version Code XXXXX		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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