



# PG300R SERIES

## FAST RECOVERY RECTIFIERS

**VOLTAGE** 50 to 1000 Volt **CURRENT** 3 Ampere

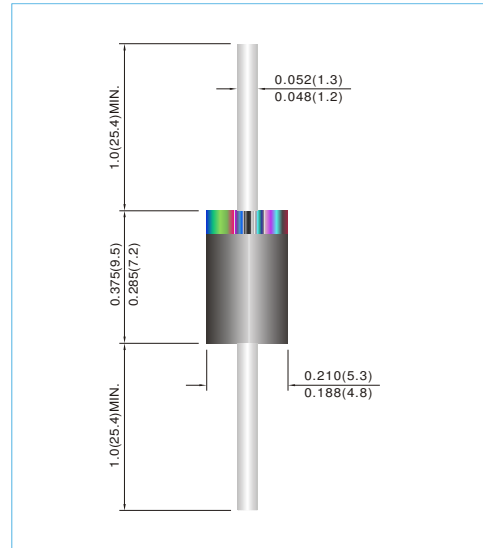
**DO-201AD** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Glass passivated junction
- Fast switching for high efficiency.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded plastic, DO-201AD
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Weight: 0.0403 ounce, 1.142 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	PG300R	PG301R	PG302R	PG304R	PG306R	PG308R	PG3010R	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 0.375"(9.5mm) lead length	$I_{F(AV)}$	3							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	125							A
Maximum Forward Voltage at 3A	$V_F$	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=100^{\circ}C$	$I_R$	1 200							$\mu A$
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	$T_J$	-55 to +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

#### Notes :

1. Reverse recovery test conditions:  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .
2. Measured at 1 MHz and applied reverse voltage of 4 VDC.
3. Thermal resistance from junction to lead length 0.375"(9.5mm) P.C.B. mounted.



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## RATING AND CHARACTERISTIC CURVES

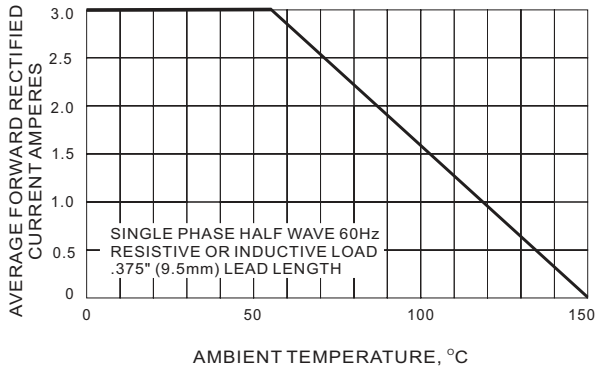


FIG. 1 FORWARD CURRENT DERATING CURVE

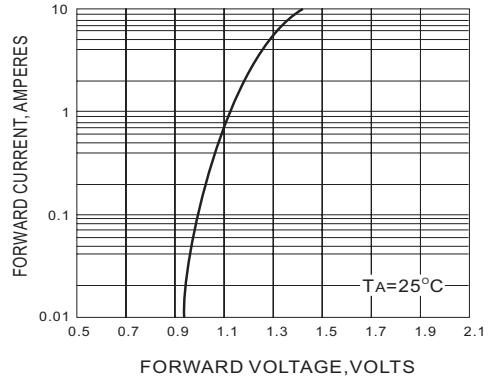


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

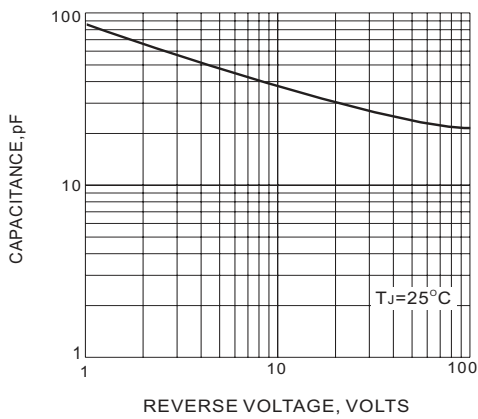


FIG. 3 TYPICAL JUNCTION CAPACITANCE

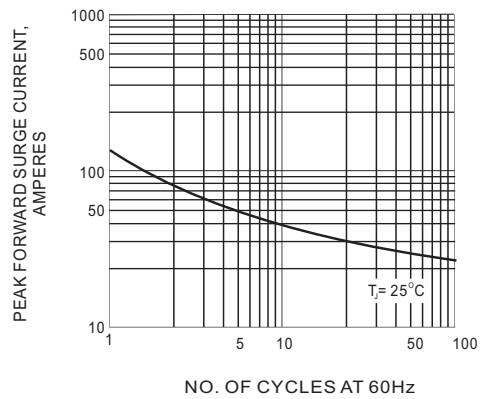


FIG. 4 PEAK FORWARD SURGE CURRENT

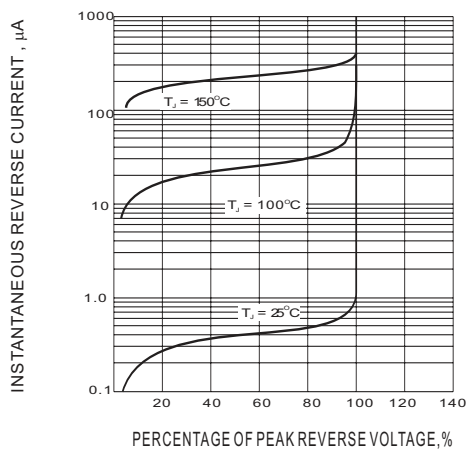


Fig. 5-TYPICAL REVERSE CHARACTERISTIC



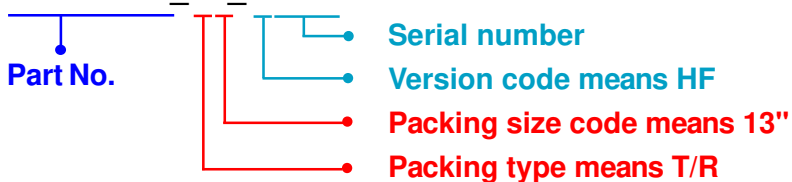
# PG300R SERIES

## Part No\_packing code\_Version

PG300R\_AY\_00001  
 PG300R\_AY\_10001  
 PG300R\_B0\_00001  
 PG300R\_B0\_10001  
 PG300R\_R2\_00001  
 PG300R\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



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



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