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#### **Product:** Fast Recovery Rectifiers

Fast Recovery Rectifiers are devices used in applications where commutation times around 150  $\div$  500ns are required. Switching Power Supplies, Electronic Ballast, Small Household Appliances are some of the typical end uses.

 $\label{thm:manufactured} \mbox{ Manufactured using HYPERECTIFIER@ Glass Passivated technology, we offer these devices housed either in leaded packages or SMD.}$ 

Product	Family	$I_{F(AV)}(A)$	$I_{FSM}(A)$	$V_{RRM}(V)$	$V_F(V)$	T <sub>RR</sub> (ns)	OUTLINE
RGP30J	RGP30	3.0	125	600	1.3	250	DO201-AD

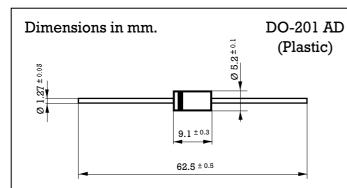


Current

3.0 A. at 55 °C.



# 3 Amp. Glass Passivated Fast Recovery Rectifier



HYPERECTIFIER

## Mounting instructions

- 1. Min. distance from body to soldering point, 4 mm.
- 2. Max. solder temperature, 350 °C.
- 3. Max. soldering time, 3.5 sec.
- 4. Do not bend lead at a point closer than 3 mm. to the body.

### • Glass passivated junction

• High current capability

Voltage

50 to 1000 V.

- The plastic material carries U/L recognition 94 V-0
- Terminals: Axial Leads
- Polarity: Color band denotes cathode

## Maximum Ratings, according to IEC publication No. 134

		RGP 30A	RGP 30B	RGP 30D	RGP 30G	RGP 30J	RGP 30K	RGP 30M	RGP 30MT	
$V_{RRM}$	Peak recurrent reverse voltage (V)	50	100	200	400	600	800	1000	1000	
$I_{F(AV)}$	Forward current at Tamb = 55 °C		3 A							
$I_{FRM}$	Recurrent peak forward current		30 A							
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)		125 A							
t <sub>rr</sub>	$\begin{array}{ll} \text{Max. reverse recovery} &  I_{\text{F}} = 0.5 \text{ A} \\ \text{I}_{\text{R}} = 1 \text{ A} \\ I_{\text{RR}} = 0.25 \text{ A} \end{array}$		150 ns			250 ns	500 ns		300 ns	
$T_{\rm j}$	Operating temperature range		− 65 to + 175 °C							
$T_{ m stg}$	Storage temperature range		− 65 to + 175 °C							
E <sub>rsm</sub>	Maximum non repetitive peak reverse avalanche energy. $I_R = 1A$ ; $T_J = 25^{\circ}C$		20 mJ							

#### Electrical Characteristics at Tamb = 25 °C

$V_{\scriptscriptstyle F}$	Max. forward voltage drop at $I_F = 3 A$	1.3 V			
$I_R$	Max. reverse current at $V_{\text{RRM}}$ at 25 °C at 125 °C	5 μ A 100 μ A			
R <sub>thj-a</sub>	Thermal resistance (I = 10 mm.) Max. Typ.	30 °C/W 15 °C/W			