

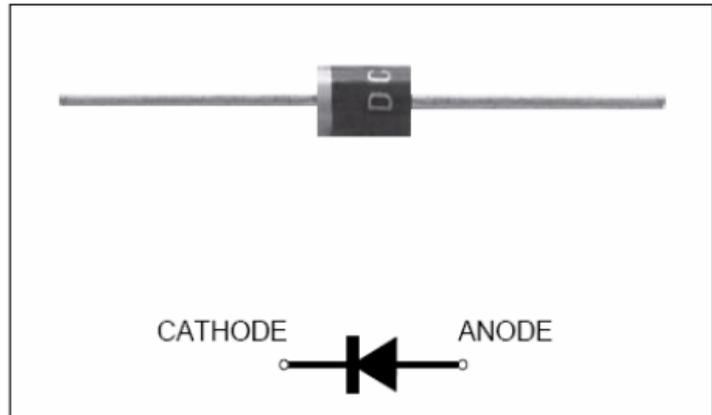
## RGP30A thru RGP30M

### 1. FEATURES

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature metallurgically bonded construction
- \* Cavity-free glass passivated junction
- \* Capable of meeting environmental standards of MIL-S-19500
- \* 3.0 A operation at TA=55°C with no thermal runaway
- \* For use in high frequency rectifier circuits
- \* Fast switching for high efficiency
- \* Typical IR less than 0.2μA
- \* High temperature soldering guaranteed: 260°C/10 seconds
- \* 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### Glass Passivated Junction Fast Switching Rectifiers

Reverse Voltage 50 to 1000V  
Forward Current 3.0A



### 2. Mechanical Data

- Case:** JEDEC DO-201AD, molded plastic over glass die
- Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity:** Color band denotes cathode end
- Mounting Position:** Any
- Weight:** 0.038 oz., 1.03 g
- Handling precaution:** None

We declare that the material of product compliance with RoHS requirements.

### 3. Electrical Characteristic

#### Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	RGP 30A	RGP 30B	RGP 30D	RGP 30G	RGP 30J	RGP 30K	RGP 30M	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>A</sub> = 55°C	I <sub>F(AV)</sub>	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	125							A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at T <sub>A</sub> = 55°C	I <sub>R(AV)</sub>	100							μA
Typical thermal resistance (Note 2)	RθJA	20							°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-50 to +150							°C

#### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	RGP 30A	RGP 30B	RGP 30D	RGP 30G	RGP 30J	RGP 30K	RGP 30M	Unit
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	1.3							V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 125°C	I <sub>R</sub>	10 200							μA
Typical reverse recovery time (Note 1)	t <sub>rr</sub>	150			250	500		ns	
Typical junction capacitance at 4.0V, 1MHz	C <sub>J</sub>	60							PF

#### NOTES:

1. I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

**Ratings and Characteristic Curves** (  $T_A = 25^\circ\text{C}$  unless otherwise noted )

Fig. 1 - Forward Current Derating Curve

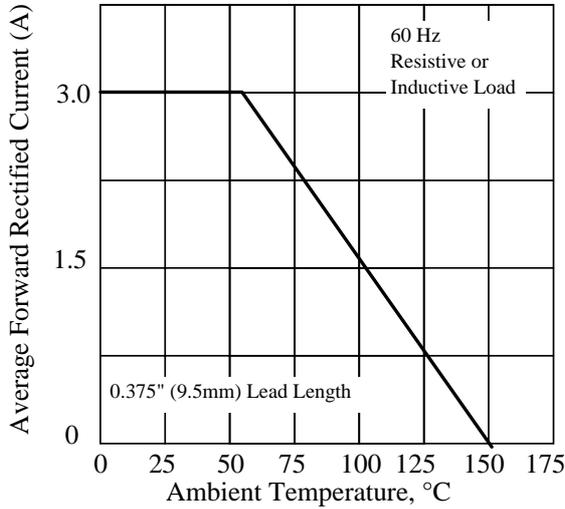


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

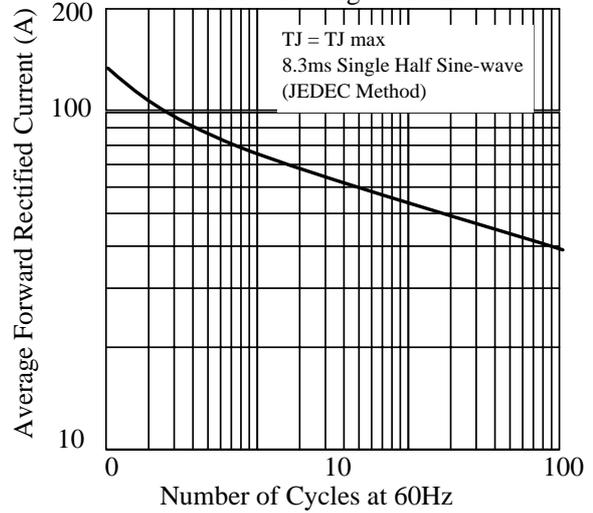


Fig 3. - Typical Instantaneous Forward Characteristics

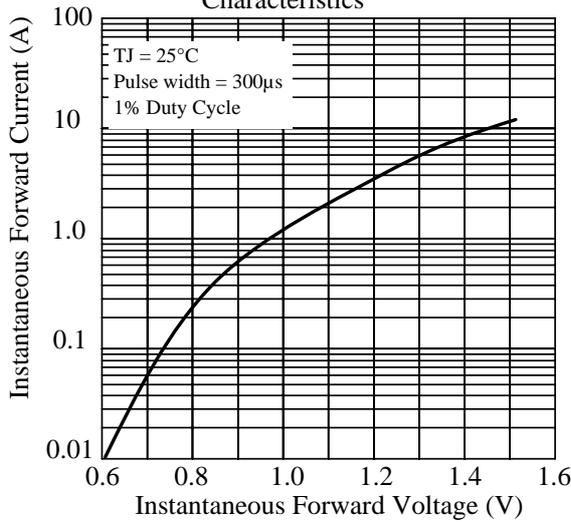


Fig 4. - Typical Reverse Characteristics

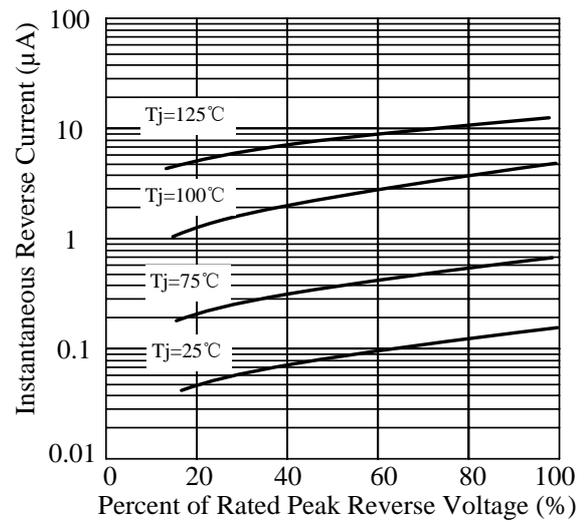


Fig 5. - typical transient thermal impedance

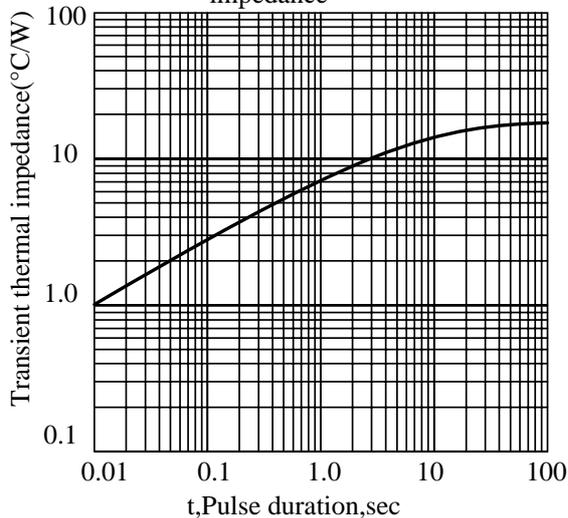
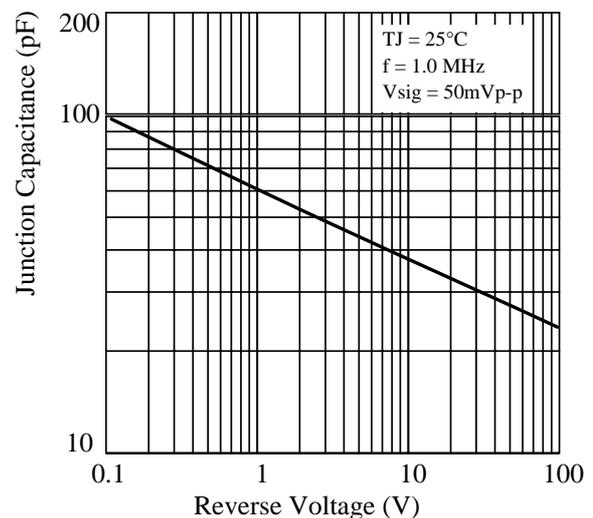
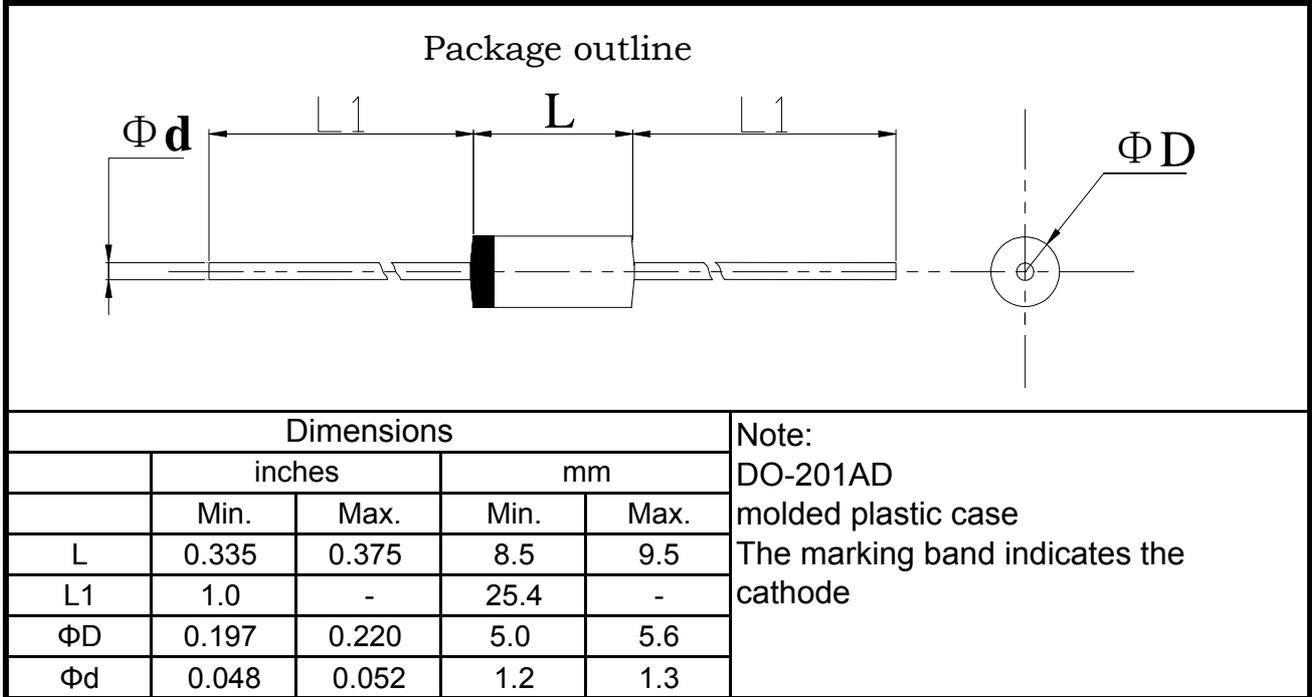


Fig 6. - Typical Junction Capacitance



**5.Package Dimensions in inches and (millimeters)**



单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)