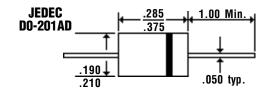
## 3.0 Amp MEGARECTIFIERS



## **Mechanical Dimensions**



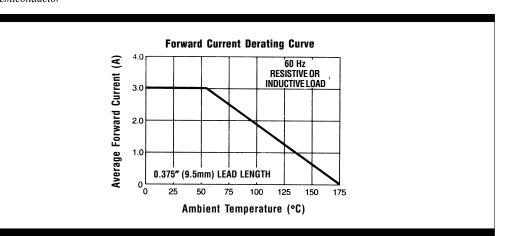
## **Features**

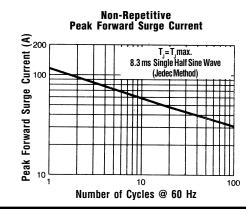
- HIGH TEMPERATURE METALLURGI-CALLY BONDED CONSTRUCTION
- SINTERED GLASS CAVITY-FREE JUNCTION
- 3.0 AMP OPERATION @  $T_A = 55^{\circ}C$ , WITH NO THERMAL RUNAWAY
- TYPICAL  $I_R < 0.1 \mu Amp$

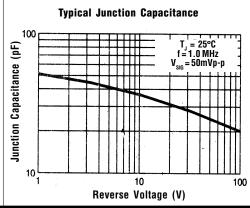
|   | GP30A 30M Series |       |       |          |       |       |       | Units          |
|---|------------------|-------|-------|----------|-------|-------|-------|----------------|
| Maximum Ratings   | GP30A            | GP30B | GP30D | GP30G    | GP30J | GP30K | GP30M |                |
| Peak Repetitive Reverse VoltageV <sub>RRM</sub>   | 50               | 100   | 200   | 400      | 600   | 800   | 1000  | Volts          |
| RMS Reverse Voltage $V_{R(rms)}$  | 35               | 70    | 140   | 280      | 420   | 560   | 700   | Volts          |
| DC Blocking Voltage $V_{\rm DC}$  | 50               | 100   | 200   | 400      | 600   | 800   | 1000  | Volts          |
| Average Forward Rectified Current $I_{F(av)}$ 3/8" Lead Length @ $T_A = 55^{\circ}C$                    | 3.0              |       |       |          |       |       |       | Amps           |
| Non-Repetitive Peak Forward Surge CurrentI <sub>FSM</sub> 8.3ms, ½ Sine Wave Superimposed on Rated Load |                  |       |       | 125      |       |       |       | Amps           |
| Operating & Storage Temperature Range $T_J$ , $T_{STRG}$  |                  |       |       | 65 to 17 | 5     |       |       | °C             |
| Electrical Characteristics  |                  |       |       |          |       |       |       |                |
| Maximum Forward Voltage @ 3.0AV <sub>F</sub>  | < 1              | 1.2>  | <     |          | 1.1 . |       | >     | Volts          |
| Maximum Full Load Reverse Current $I_R(av)$<br>Full Cycle Average @ $T_A = 55$ °C                       |                  |       |       | 100      |       |       |       | μAmps          |
|   |                  |       |       |          |       |       |       | μAmps<br>μAmps |
| Typical Junction CapacitanceC <sub>J</sub> (Note 1)   |                  |       |       | 40       |       |       |       | pF             |
| Typical Thermal ResistanceR <sub>e,JA</sub> (Note 2)  |                  |       |       | 20       |       |       |       | °C/W           |
| Typical Reverse Recovery Timet <sub>RR</sub> (Note 3)   |                  |       |       | 3.0      |       |       |       | μS             |

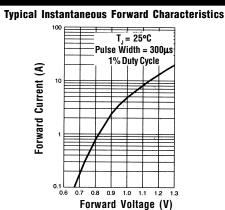


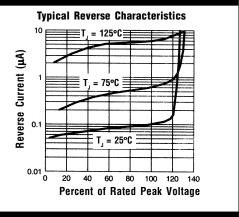
## 3.0 Amp MEGARECTIFIERS











Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 Hz Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

NOTES: 1. Measured @ 1 MHz and applied reverse voltage of 4.0V.

- 2. Thermal Resistance from Junction to Ambient at 3/8" Lead Length, P.C. Board Mounted.
- 3. Reverse Recovery Condition  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$ .