



Micro Commercial Components  
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## EGP30A THRU EGP30K

### Features

- Superfast recovery time for high efficiency
- Glass passivated cavity-free junction, Plastic case
- Low forward voltage, high current capability
- Low leakage current

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Ambient

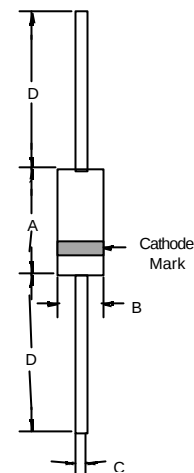
| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------------------------------|---------------------|-----------------------------|
| EGP30A          | 50V                                    | 35V                 | 50V                         |
| EGP30B          | 100V                                   | 70V                 | 100V                        |
| EGP30D          | 200V                                   | 140V                | 200V                        |
| EGP30F          | 300V                                   | 210V                | 300V                        |
| EGP30G          | 400V                                   | 280V                | 400V                        |
| EGP30J          | 600V                                   | 420V                | 600V                        |
| EGP30K          | 800V                                   | 560V                | 800V                        |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                                                 |             |                         |                                                                                                 |
|---------------------------------------------------------------------------------|-------------|-------------------------|-------------------------------------------------------------------------------------------------|
| Maximum Average Forward Current                                                 | $I_{F(AV)}$ | 3.0 A                   | $T_A = 55^\circ\text{C}$                                                                        |
| Peak Forward Surge Current                                                      | $I_{FSM}$   | 125A                    | 8.3ms, half sine                                                                                |
| Maximum Instantaneous Forward Voltage<br>EGP30A-30D<br>EGP30F-30G<br>EGP30J-30K | $V_F$       | 0.95V<br>1.25V<br>1.70V | $I_F = 3.0\text{A}$<br>$T_A = 25^\circ\text{C}$                                                 |
| Maximum DC Reverse Current At Rated DC Blocking Voltage                         | $I_R$       | 5.0uA<br>100uA          | $T_A = 25^\circ\text{C}$<br>$T_A = 125^\circ\text{C}$                                           |
| Reverse Recovery Time<br>EGP30A-30G<br>EGP30J-30K                               | $T_{rr}$    | 50nS<br>75nS            | $T_A = 25^\circ\text{C}$<br>$I_F = 0.5\text{A}$ , $I_R = 1.0\text{A}$ ,<br>$t_r = 0.25\text{A}$ |
| Typical Junction Capacitance<br>EGP30A-30D<br>EGP30F-30K                        | $C_J$       | 95pF<br>75pF            | Measured at<br>$f = 1.0\text{MHz}$<br>$V_R = 4.0\text{V}$                                       |

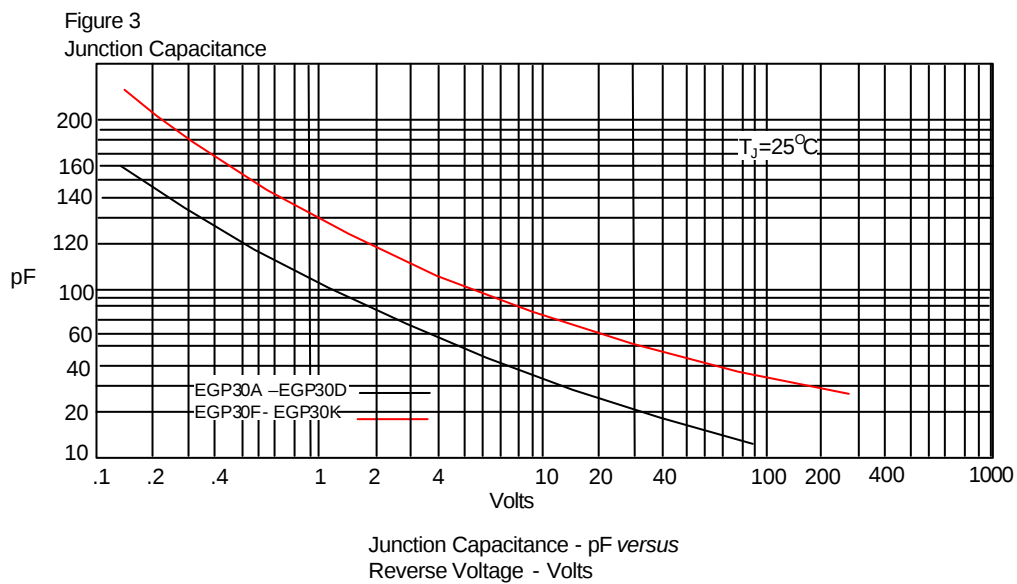
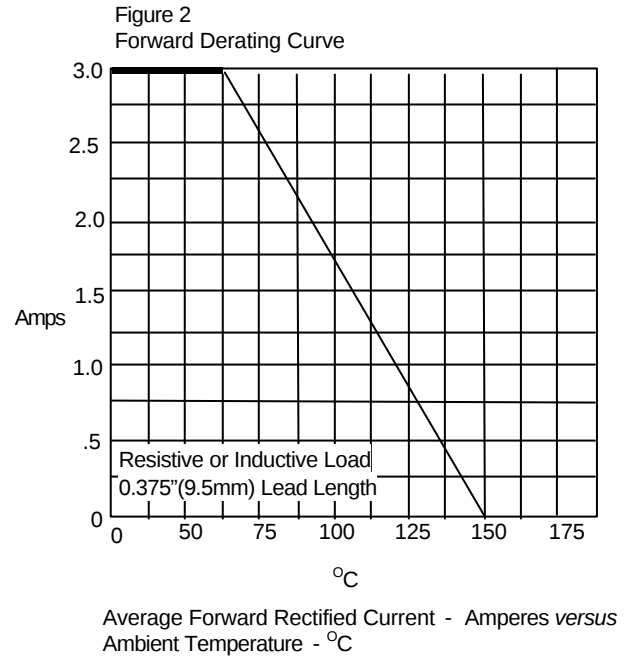
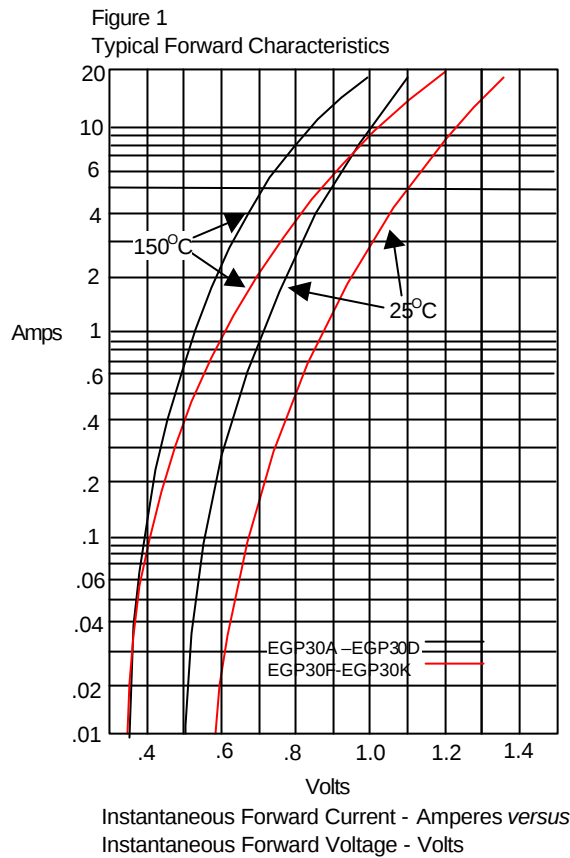
### 3.0 Amp Glass Passivated High Efficient Rectifiers 50 to 800 Volts

#### DO-201AE

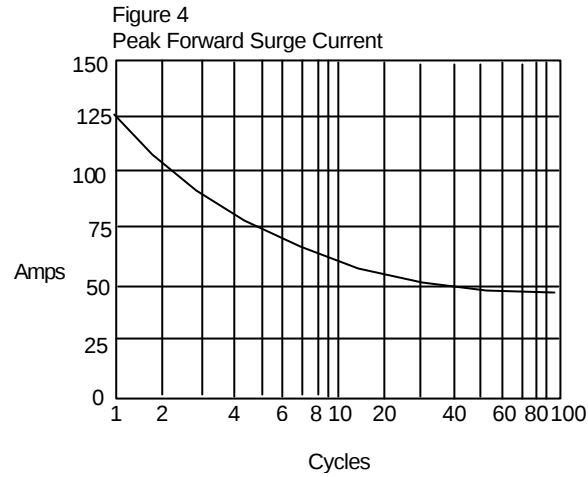


| DIM | INCHES |      | MM    |      | NOTE |
|-----|--------|------|-------|------|------|
|     | MIN    | MAX  | MIN   | MAX  |      |
| A   | ---    | .370 | ---   | 9.50 |      |
| B   | ---    | .250 | ---   | 6.40 |      |
| C   | .038   | .042 | 0.96  | 1.06 |      |
| D   | 1.000  | ---  | 25.40 | ---  |      |

# EGP30A thru EGP30K



# EGP30A thru EGP30K



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles

Figure 5  
Reverse Recovery Time Characteristic And Test Circuit Diagram

