



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

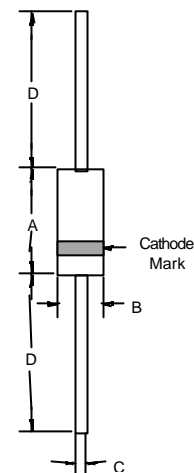
**3.0 Amp Glass  
Passivated High  
Efficient Rectifiers  
50 to 800 Volts**

### 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

### DO-201AE

| 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                        |

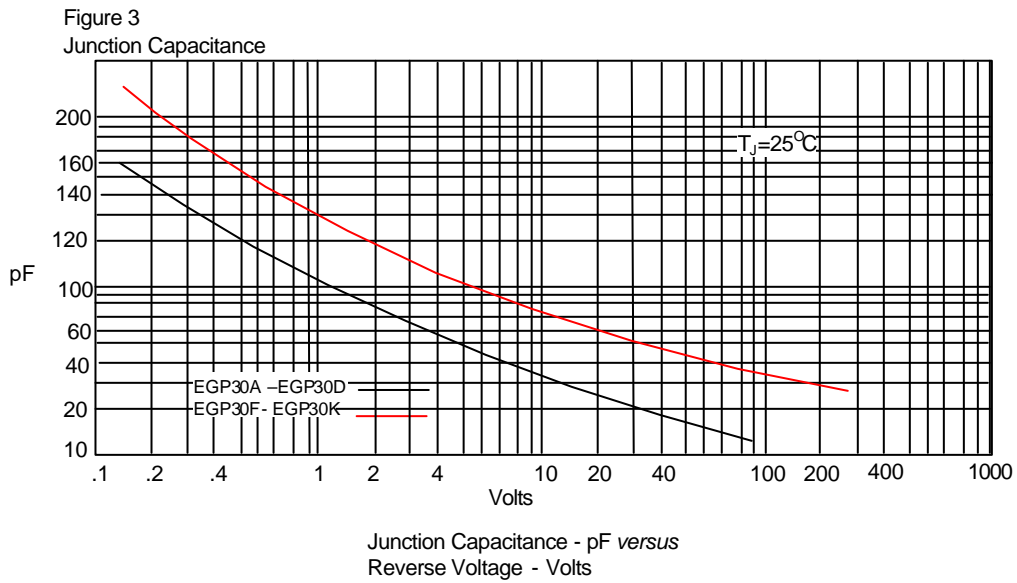
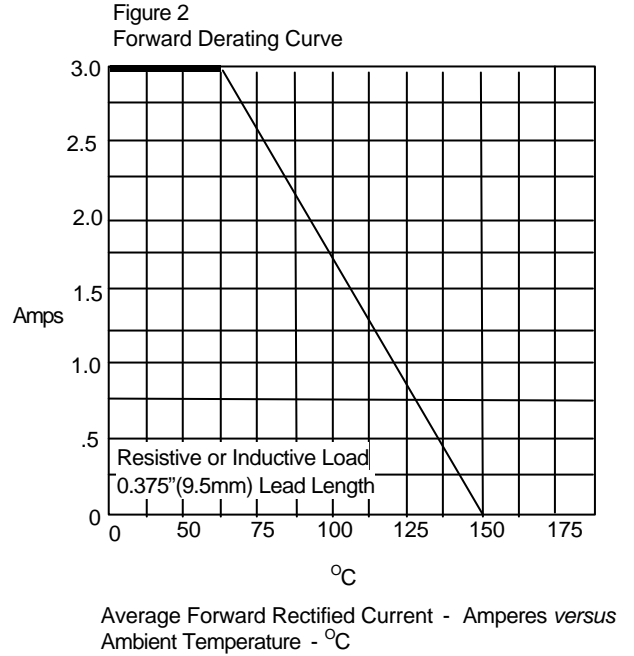
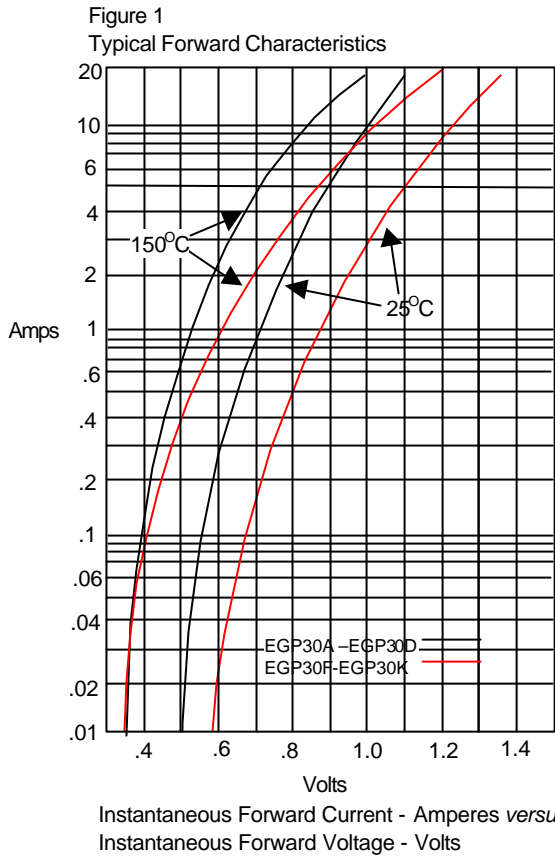


### Electrical Characteristics @ 25°C Unless Otherwise Specified

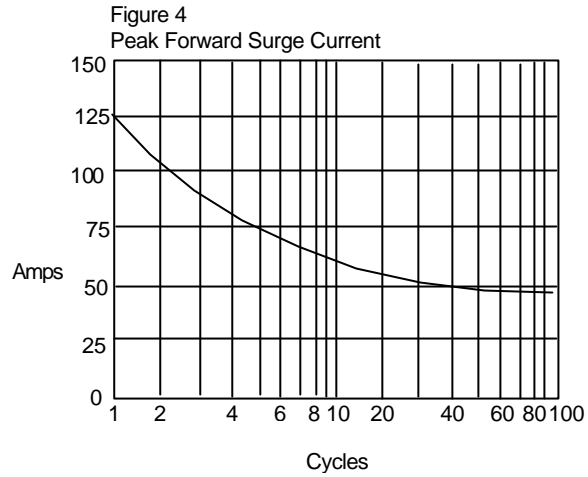
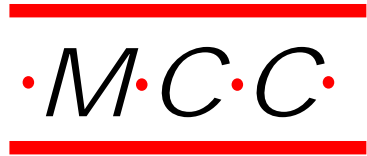
|   |             |                         |  |
|---|-------------|-------------------------|--|
| Maximum Average Forward Current   | $I_{F(AV)}$ | 3.0 A                   | $T_A = 55^\circ\text{C}$                                       |
| Peak Forward Surge Current  | $I_{FSM}$   | 125A                    | 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 | $I_F=3.0A$<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>$I_F=0.5A, I_R=1.0A,$<br>$I_r=0.25A$ |
| Typical Junction Capacitance<br>EGP30A-30D<br>EGP30F-30K                        | $C_J$       | 95pF<br>75pF            | Measured at<br>$f=1.0\text{MHz}$<br>$V_R=4.0V$                 |

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

# EGP30A thru EGP30K

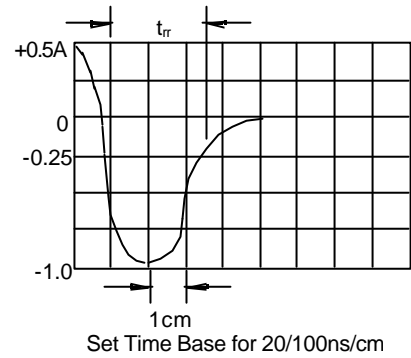
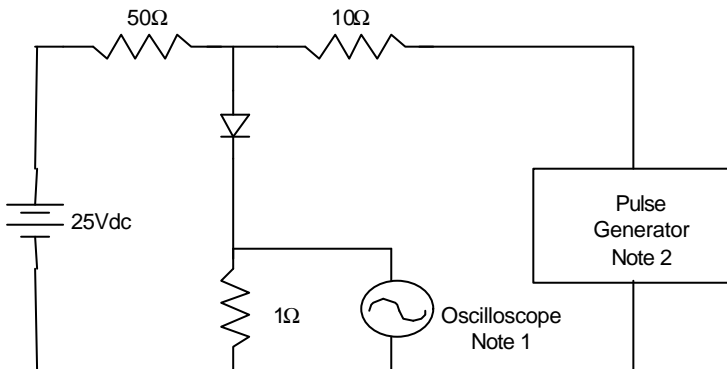


# EGP30A thru EGP30K



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

Figure 5  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- Notes:
1. Rise Time = 7ns max.  
Input impedance = 1 megohm, 22pF
  2. Rise Time = 10ns max.  
Source impedance = 50 ohms
  3. Resistors are non-inductive