3 Amp. Glass Passivated Avalanche Ultrafast Recovery Rectifier

|  | Voltage <br> 200 V Current <br> 3 A at $55^{\circ} \mathrm{C}$ <br> HYPERECTIFIER  |
| :---: | :---: |
| Mounting instructions <br> 1. Min. distance from body to soldering point, 4 mm . <br> 2. Max. solder temperature, $350^{\circ} \mathrm{C}$. <br> 3. Max. soldering time, 3.5 sec . <br> 4. Do not bend lead at a point closer than 3 mm . to the body. | - Glass Passivated Junction <br> - High current capability <br> - The plastic material carries U/L recognition 94 V-0 <br> - Terminals: Axial Leads <br> - Polarity: Color band denotes cathode |

Maximum Ratings, according to IEC publication No. 134

|  |  | EGP30DT |
| :---: | :---: | :---: |
| $\mathrm{V}_{\text {RRM }}$ | Peak Recurrent reverse voltage | 200 V |
| VrMS | Maximum RMS voltage | 140 V |
| $V_{D C}$ | Maximum DC blocking voltage | 200 V |
| $\mathrm{I}_{\text {F(AV) }}$ | Forward current at Tamb $=55^{\circ} \mathrm{C}$ | 3 A |
| $\mathrm{I}_{\text {PRM }}$ | Recurrent peak forward current | 30 A |
| $\mathrm{I}_{\text {FSM }}$ | 8.3 ms . peak forward surge current (Jedec Method) | 125 A |
| $\mathrm{t}_{\mathrm{rr}}$ | Max. reverse recovery time from $\mathrm{I}_{\mathrm{F}}=0.5 \mathrm{~A} ; \mathrm{I}_{\mathrm{R}}=1 \mathrm{~A} ; \mathrm{I}_{\mathrm{RR}}=0.25 \mathrm{~A}$ | 35 ns |
| $\mathrm{C}_{\mathrm{j}}$ | Typical Junction Capacitance at 1 MHz and reverse voltaje of $4 \mathrm{~V}_{\mathrm{DC}}$ | 100 pF |
| $\mathrm{T}_{\mathrm{j}}$ | Operating temperature range | -65 to $+150^{\circ} \mathrm{C}$ |
| $\mathrm{T}_{\text {stg }}$ | Storage temperature range | -65 to $+150^{\circ} \mathrm{C}$ |
| $\mathrm{E}_{\text {RSM }}$ | Maximum non repetitive peak reverse avalanche energy. $\mathrm{I}_{\mathrm{R}}=1.0 \mathrm{~A} ; \mathrm{T}_{\mathrm{J}}=25^{\circ} \mathrm{C}$ | 20 mJ |

Electrical Characteristics at Tamb $=25^{\circ} \mathrm{C}$

| $\mathrm{V}_{\mathrm{F}}$ | Max. forward voltage drop at $\mathrm{I}_{\mathrm{F}}=3 \mathrm{~A}$ | 0.9 V |
| :--- | :--- | :---: |
| $\mathrm{I}_{\mathrm{R}}$ | Max. reverse current at $\mathrm{V}_{\text {RRM }}$at $25^{\circ} \mathrm{C}$ <br> at $150^{\circ} \mathrm{C}$ | $5 \mu \mathrm{~A}$ |
| $\mathrm{R}_{\text {mija }-}$ | Max. thermal resistance $(\mathrm{l}=10 \mathrm{~mm})$. | $50 \mu \mathrm{~A}$ |

## Rating And Characteristic Curves



MAXIMUM NON REPETITIVE


TYPICAL FORWARD CHARACTERISTIC


TYPICAL JUNCTION CAPACITANCE


