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## Product: Ultrafast Recovery Rectifiers

FAGOR ELECTRONICA's Ultrafast Recovery Rectifiers offer reverse recovery times down to 30ns using broad range of forward current possibilities and packages.

Ideal for high frequency applications like SMPS, Monitors, Electronic Ballast, Inverters....

Manufactured using HYPERECTIFIER© technology, we offer these devices housed either in leaded packages or SMD.

| Product | Family | $\mathrm{I}_{\mathrm{F}(\mathrm{AV})}(\mathrm{A})$ | $\mathrm{I}_{\mathrm{FSM}}(\mathrm{A})$ | $\mathrm{V}_{\mathrm{RRM}}(\mathrm{V})$ | $\mathrm{V}_{\mathrm{F}}(\mathrm{V})$ | $\mathrm{T}_{\mathrm{RR}}(\mathrm{ns})$ | OUTLINE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| EGP50B | EGP50 | 5.0 | 150 | 100 | 1.0 | 50 | DO201-AD |

5 Amp. Glass Passivated Avalanche Ultrafast Recovery Rectifier

|  | Voltage <br> 50 to 400 V. <br> Current <br> 5 A at $55^{\circ} \mathrm{C}$. |
| :---: | :---: |
| Mounting instructions | - Glass Passivated Junction |
| 1. Min. distance from body to soldering point, 4 mm . | - High current capability |
| 2. Max. solder temperature, $350^{\circ} \mathrm{C}$. | - The plastic material carries U/L recognition 94 V-0 |
| 3. Max. soldering time, 3.5 sec. | - Terminals: Axial Leads |
| 4. Do not bend lead at a point closer than 3 mm . to the body. | - Polarity: Color band denotes cathode |

Maximum Ratings, according to IEC publication No. 134

|  |  | EGP50A | EGP50B | EGP50D | EGP50F | EGP50G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{V}_{\text {RRM }}$ | Peak Recurrent reverse voltage (V) | 50 | 100 | 200 | 300 | 400 |
| $\mathrm{V}_{\text {PMS }}$ | Maximum RMS voltage | 35 | 70 | 140 | 210 | 280 |
| $V_{D C}$ | Maximum DC blocking voltage | 50 | 100 | 200 | 300 | 400 |
| $\mathrm{I}_{\mathrm{F}(A)}$ | Forward current at Tamb $=55^{\circ} \mathrm{C}$ | 5 A |  |  |  |  |
| $\mathrm{I}_{\text {FRM }}$ | Recurrent peak forward current (A) | 50 A |  |  |  |  |
| $\mathrm{I}_{\text {FSM }}$ | 8.3 ms . peak forward surge current Jedec Method) | 150 A |  |  |  |  |
| $\mathrm{t}_{\mathrm{rr}}$ | Max. reverse recovery time from $\mathrm{I}_{\mathrm{F}}=0.5 \mathrm{~A} ; \mathrm{I}_{\mathrm{R}}=1 \mathrm{~A} ; \mathrm{I}_{\mathrm{RR}}=0.25 \mathrm{~A}$ | 50 ns |  |  |  |  |
| $\mathrm{C}_{\mathrm{j}}$ | Typical Junction Capacitance at 1 MHz and reverse voltaje of $4 V_{D C}$ | 100 pF |  |  |  |  |
| $\mathrm{T}_{\mathrm{j}}$ | Operating temperature range | -65 to $+150^{\circ} \mathrm{C}$ |  |  |  |  |
| $\mathrm{T}_{\text {stg }}$ | Storage temperature range | -65 to $+150^{\circ} \mathrm{C}$ |  |  |  |  |
| $E_{\text {RSM }}$ | Maximum non repetitive peak reverse avalanche energy. $\mathrm{I}_{\mathrm{R}}=1 \mathrm{~A} ; \mathrm{T}_{\mathrm{J}}=25^{\circ} \mathrm{C}$ | 20 mJ |  |  |  |  |

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

| $\mathrm{V}_{\mathrm{F}}$ | Max. forward voltage drop at $\mathrm{I}_{\mathrm{F}}=5 \mathrm{~A}$ | 1.0V | 1.25V |
| :---: | :---: | :---: | :---: |
| $\mathrm{I}_{\mathrm{R}}$ | Max. reverse current at $V_{\text {RRM }} \begin{array}{r}\text { at } 25^{\circ} \mathrm{C} \\ \text { at } 150{ }^{\circ} \mathrm{C}\end{array}$ | $\begin{gathered} 5 \mu A \\ 50 \mu A \end{gathered}$ |  |
| $\mathrm{R}_{\mathrm{tbj-a}}$ | Max. thermal resistance ( $\mathrm{l}=10 \mathrm{~mm}$.) | $20^{\circ} \mathrm{C} / \mathrm{W}$ |  |

