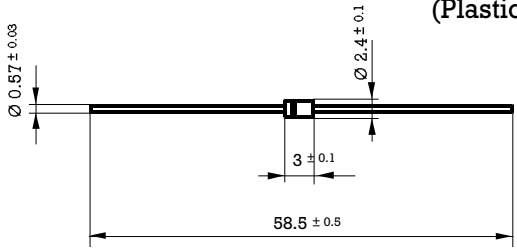


## 1 Amp. Glass Passivated Fast Recovery Rectifier

|                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Dimensions in mm.</p> <p>DO-41-MINI<br/>(Plastic)</p>                                                                                                                                                                | <p>Voltage<br/>50 to 1000 V.</p> <p>Current<br/>1.0 A. at 25 °C.</p> <p><b>HYPERECTIFIER®</b></p>                                                                                                                                                                 |
| <p><b>Mounting instructions</b></p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350 °C.</li> <li>3. Max. soldering time, 3.5 sec.</li> <li>4. Do not bend lead at a point closer than 2 mm. to the body.</li> </ol> | <ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• High current capability</li> <li>• The plastic material carries U/L recognition 94 V-0</li> <li>• Terminals: Axial Leads</li> <li>• Polarity: Color band denotes cathode</li> </ul> |

### Maximum Ratings, according to IEC publication No. 134

|                    |                                                                                                                  | RGP<br>08A       | RGP<br>08B | RGP<br>08D | RGP<br>08G | RGP<br>08J | RGP<br>08K | RGP<br>08M | RGP<br>08MT |
|--------------------|------------------------------------------------------------------------------------------------------------------|------------------|------------|------------|------------|------------|------------|------------|-------------|
| Marking Code       |                                                                                                                  | K1               | K2         | K3         | K4         | K5         | K6         | K7         | K8          |
| V <sub>RRM</sub>   | Peak recurrent reverse voltage (V)                                                                               | 50               | 100        | 200        | 400        | 600        | 800        | 1000       | 1000        |
| I <sub>F(AV)</sub> | Forward current at Tamb = 25 °C                                                                                  | 1 A              |            |            |            |            |            |            |             |
| I <sub>FRM</sub>   | Recurrent peak forward current                                                                                   | 10 A             |            |            |            |            |            |            |             |
| I <sub>FSM</sub>   | 8.3 ms. peak forward surge current<br>(Jedec Method)                                                             | 30 A             |            |            |            |            |            |            |             |
| t <sub>rr</sub>    | Max. reverse recovery<br>time from<br>I <sub>F</sub> = 0.5 A<br>I <sub>R</sub> = 1 A<br>I <sub>RR</sub> = 0.25 A | 150 ns           |            |            |            | 250 ns     | 500 ns     |            | 300 ns      |
| T <sub>j</sub>     | Operating temperature range                                                                                      | − 65 to + 150 °C |            |            |            |            |            |            |             |
| T <sub>stg</sub>   | Storage temperature range                                                                                        | − 65 to + 150 °C |            |            |            |            |            |            |             |
| E <sub>RSM</sub>   | Maximum non repetitive peak<br>reverse avalanche energy.<br>I <sub>R</sub> = 0.5 A ; T <sub>j</sub> = 25 °C      | 15 mJ            |            |            |            |            |            |            |             |

### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

|                            |                                                                                              |                                        |
|----------------------------|----------------------------------------------------------------------------------------------|----------------------------------------|
| $V_F$                      | Max. forward voltage drop at $I_F = 1.0\text{ A}$                                            | 1.3 V                                  |
| $I_R$                      | Max. reverse current at $V_{RRM}$ at 25 °C<br>at 150 °C                                      | 5 $\mu\text{ A}$<br>200 $\mu\text{ A}$ |
| $R_{thj-a}$<br>$R_{thj-a}$ | MAXIMUM THERMAL RESISTANCE<br>Junction-Ambient. With Heatsink<br>Junction-Ambient. In P.C.B. | 45 °C/W<br>100 °C/W                    |

## Rating And Characteristic Curves

