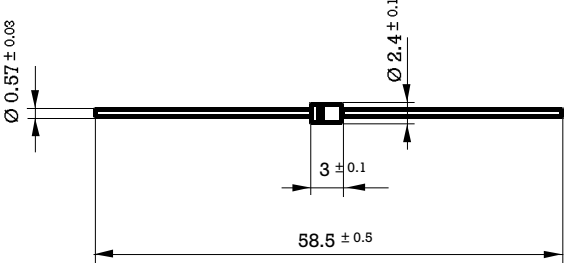


## 1 Amp. Glass Passivated Junction Rectifier

|                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Dimensions in mm.</p> <p>DO-41-MINI<br/>(Plastic)</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> | <p>Voltage<br/>50 to 1000 V.</p> <p>Current<br/>1.0 A. at 25 °C.</p>  <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

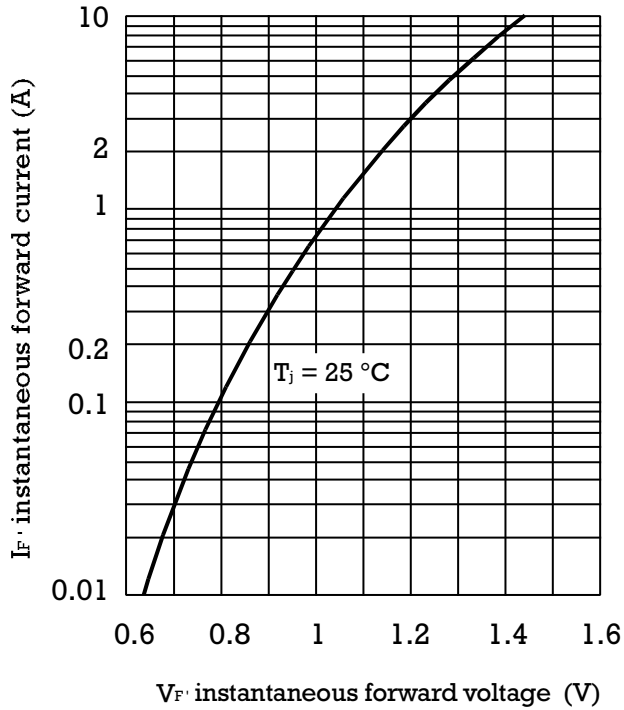
|              |                                                                                                      | GP08A            | GP08B | GP08D | GP08G | GP08J | GP08K | GP08M |
|--------------|------------------------------------------------------------------------------------------------------|------------------|-------|-------|-------|-------|-------|-------|
| Marking Code |                                                                                                      | D1               | D2    | D3    | D4    | D5    | D6    | D7    |
| $V_{RRM}$    | Peak recurrent reverse voltage (V)                                                                   | 50               | 100   | 200   | 400   | 600   | 800   | 1000  |
| $I_{F(AV)}$  | Forward current at $T_{amb} = 25\text{ °C}$                                                          | 1.0 A            |       |       |       |       |       |       |
| $I_{FRM}$    | Recurrent peak forward current                                                                       | 8 A              |       |       |       |       |       |       |
| $I_{FSM}$    | 8.3 ms. peak forward surge current<br>(Jedec Method)                                                 | 25 A             |       |       |       |       |       |       |
| $T_j$        | Operating temperature range                                                                          | – 65 to + 150 °C |       |       |       |       |       |       |
| $T_{stg}$    | Storage temperature range                                                                            | – 65 to + 150 °C |       |       |       |       |       |       |
| $E_{RSM}$    | Maximum non repetitive peak reverse avalanche energy.<br>$I_R = 0.5\text{ A}$ ; $T_j = 25\text{ °C}$ | 15 mJ            |       |       |       |       |       |       |

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

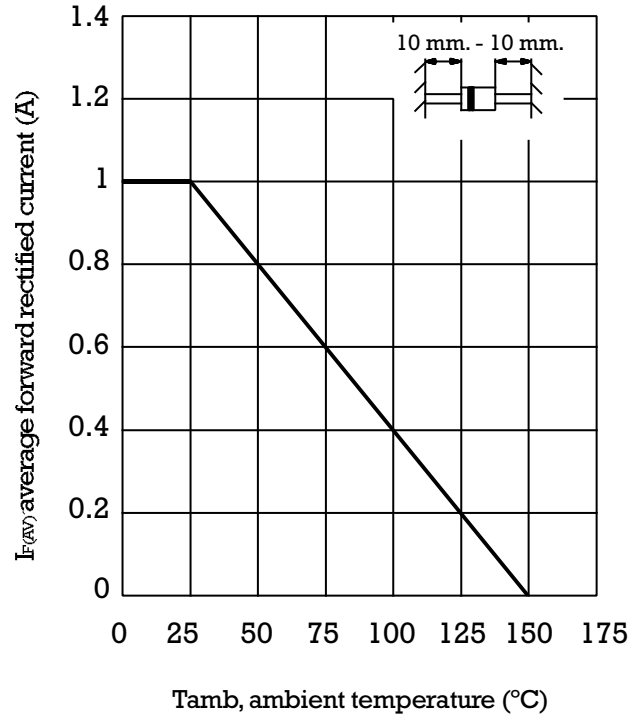
|                            |                                                                                               |                                       |
|----------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------|
| $V_F$                      | Max. forward voltage drop at $I_F = 1\text{ A}$                                               | 1.1 V                                 |
| $I_R$                      | Max. reverse current at $V_{RRM}$ at 25 °C<br>at 125 °C                                       | 5 $\mu\text{ A}$<br>50 $\mu\text{ A}$ |
| $R_{thj-a}$<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

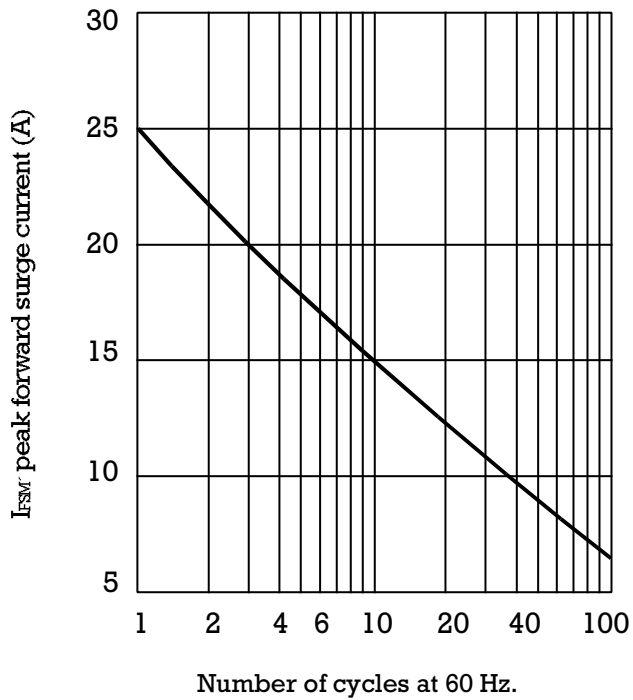
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

