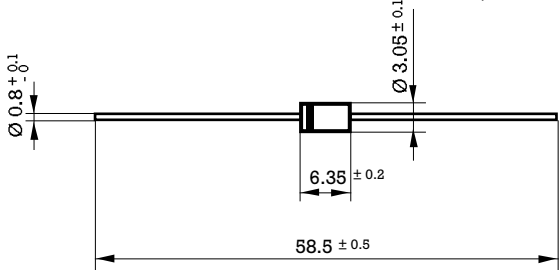



## 1 Amp. Glass Passivated Junction Rectifier

|  |   |
|--|---|
| <p>Dimensions in mm.</p>  <p>DO-15<br/>(Plastic)</p>  | <p>Voltage<br/>50 to 1000 V.</p> <p>Current<br/>1.0 A. at 70 °C.</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

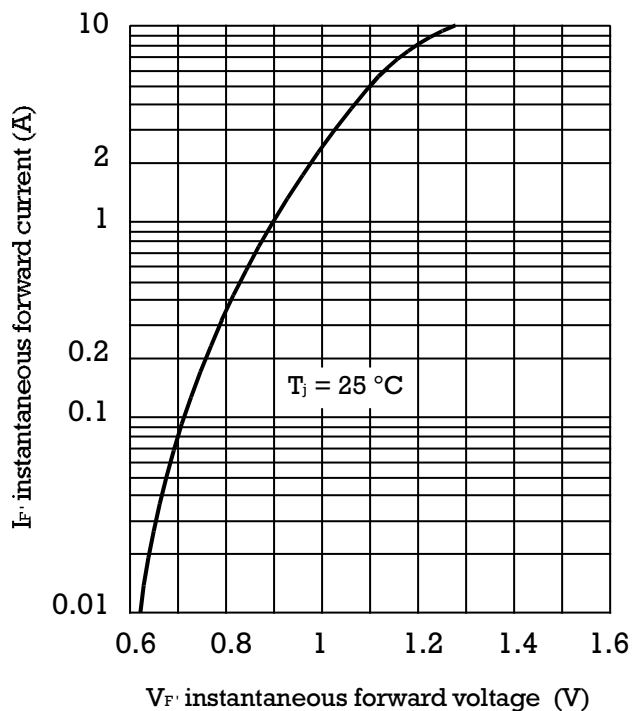
|             |  | BYW27<br>50      | BYW27<br>100 | BYW27<br>200 | BYW27<br>400 | BYW27<br>600 | BYW27<br>800 | BYW27<br>1000 |
|-------------|--|------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| $V_{RRM}$   | Peak recurrent reverse voltage (V)   | 50               | 100          | 200          | 400          | 600          | 800          | 1000          |
| $I_{F(AV)}$ | Forward current at $T_{amb} = 70\text{ °C}$  | 1 A              |              |              |              |              |              |               |
| $I_{FRM}$   | Recurrent peak forward current   | 10 A             |              |              |              |              |              |               |
| $I_{FSM}$   | 10 ms. peak forward surge current  | 50 A             |              |              |              |              |              |               |
| $T_j$       | Operating temperature range  | - 65 to + 175 °C |              |              |              |              |              |               |
| $T_{stg}$   | Storage temperature range  | - 65 to + 175 °C |              |              |              |              |              |               |
| $E_{RSM}$   | Maximum non repetitive peak reverse avalanche energy.<br>$I_R = 0.5\text{ A}$ ; $T_j = 25\text{ °C}$ | 20 mJ            |              |              |              |              |              |               |

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

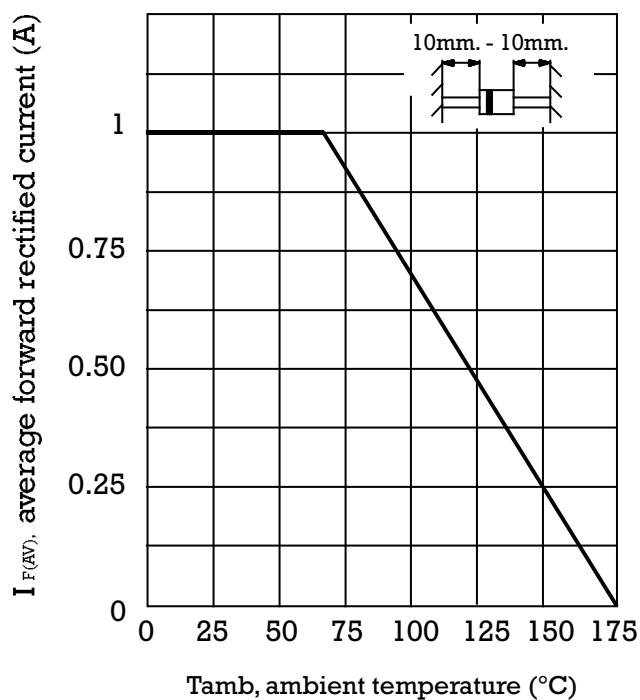
|             |   |                      |
|-------------|---|----------------------|
| $V_F$       | Max. forward voltage drop at $I_F = 1\text{ A}$         | 1 V                  |
| $I_R$       | Max. reverse current at $V_{RRM}$ at 25 °C<br>at 100 °C | 200 nA<br>15 $\mu$ A |
| $R_{thj-a}$ | Max. thermal resistance ( $l = 10\text{ mm.}$ )         | 60 °C/W              |

### Rating and Characteristic Curves

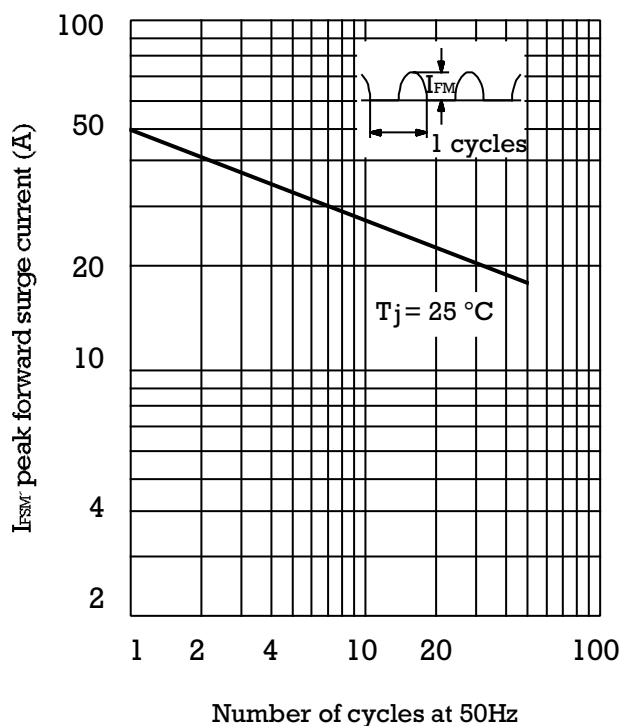
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

