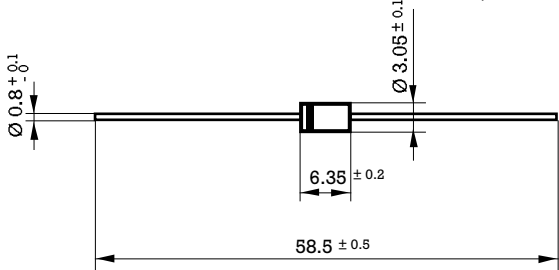



1 Amp. Glass Passivated Junction Rectifier

| | |
|--|---|
| <p>Dimensions in mm.</p>  <p>DO-15 (Plastic)</p> | <p>Voltage 50 to 1000 V.</p> <p>Current 1.0 A. at 70 °C.</p>  |
| <p>Mounting instructions</p> <ol style="list-style-type: none"> 1. Min. distance from body to soldering point, 4 mm. 2. Max. solder temperature, 350 °C. 3. Max. soldering time, 3.5 sec. 4. Do not bend lead at a point closer than 2 mm. to the body. | <ul style="list-style-type: none"> • Glass passivated junction • High current capability • The plastic material carries U/L recognition 94 V-0 • Terminals: Axial Leads • Polarity: Color band denotes cathode |

Maximum Ratings, according to IEC publication No. 134

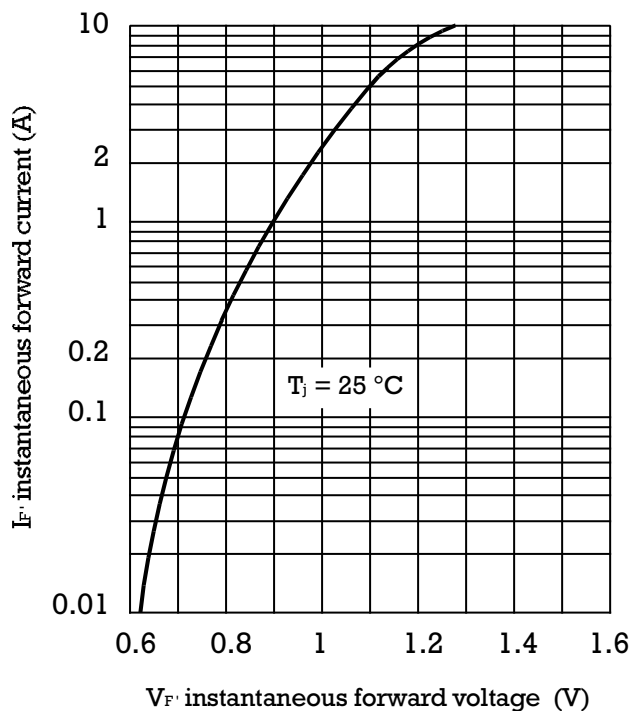
| | | BYW27 50 | BYW27 100 | BYW27 200 | BYW27 400 | BYW27 600 | BYW27 800 | BYW27 1000 |
|-------------|--|------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| V_{RRM} | Peak recurrent reverse voltage (V) | 50 | 100 | 200 | 400 | 600 | 800 | 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. $I_R = 0.5\text{ A}$; $T_j = 25\text{ °C}$ | 20 mJ | | | | | | |

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

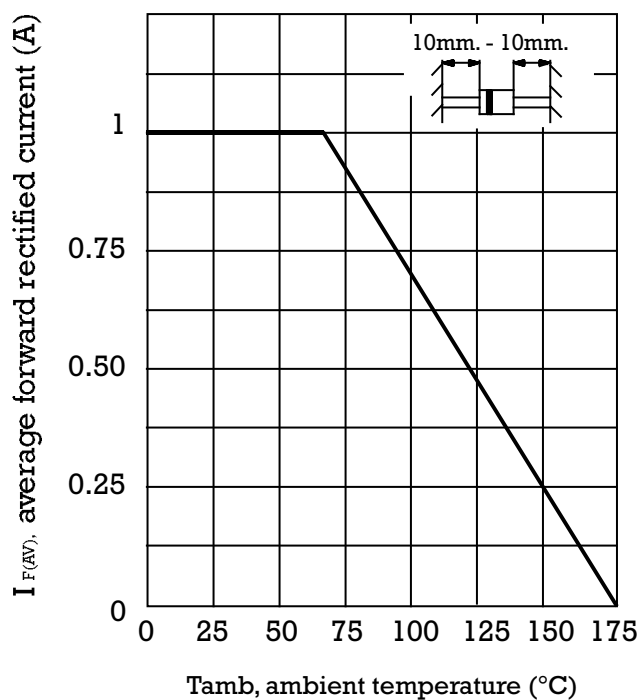
| | | |
|-------------|---|----------------------|
| V_F | Max. forward voltage drop at $I_F = 1\text{ A}$ | 1 V |
| I_R | Max. reverse current at V_{RRM} at 25 °C at 100 °C | 200 nA 15 μ A |
| R_{thj-a} | Max. thermal resistance ($l = 10\text{ mm.}$) | 60 °C/W |

Rating and Characteristic Curves

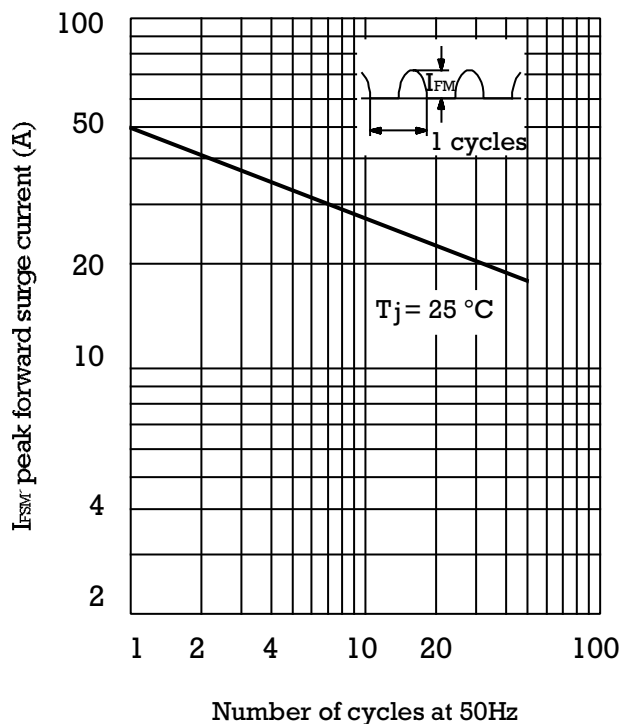
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

