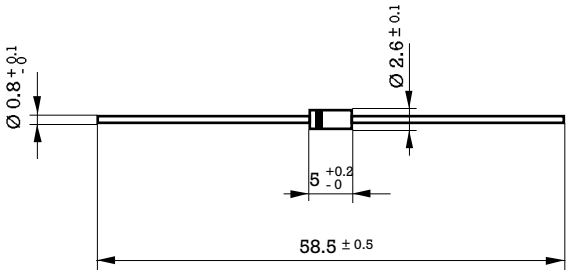



1 Amp. Glass Passivated Junction Rectifier

| | |
|--|--|
| <p>Dimensions in mm.</p> <p style="text-align: right;">DO-41 (Plastic)</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 | <p>Voltage 50 to 1000 V.</p> <p>Current 1.0 A. at 75 °C.</p>  |
| | <ul style="list-style-type: none"> • Glass passivated junction • High current capability • The plastic material carries U/L recognition 94V-0 • Terminals: Axial Leads • Polarity: Color band denotes cathode |

Maximum Ratings, according to IEC publication No. 134

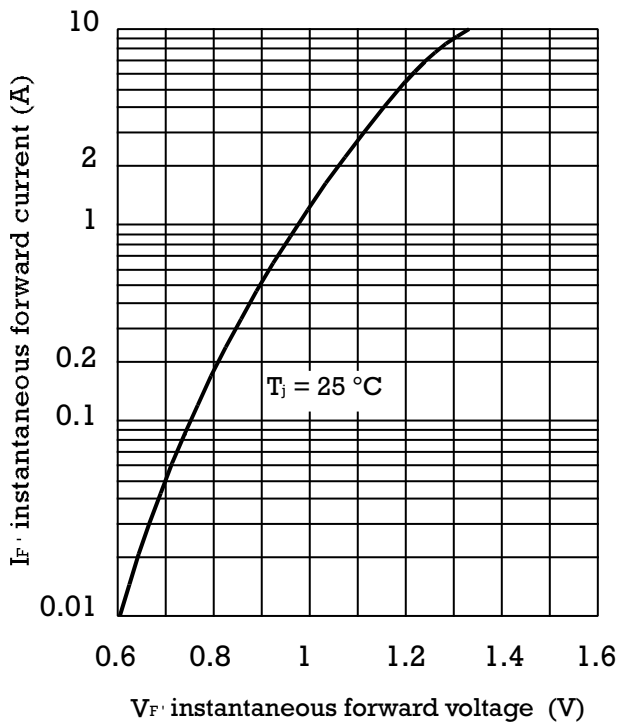
| | | 1N 4001GP | 1N 4002GP | 1N 4003GP | 1N 4004GP | 1N 4005GP | 1N 4006GP | 1N 4007GP |
|-------------|--|------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| V_{RRM} | Peak recurrent reverse voltage (V) | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| $I_{F(AV)}$ | Forward current at $T_{amb} = 75\text{ °C}$ | 1.0 A | | | | | | |
| I_{FRM} | Recurrent peak forward current | 10 A | | | | | | |
| I_{FSM} | 8.3 ms. peak forward surge current (Jedec Method) | 30 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 $T_{amb} = 25\text{ °C}$

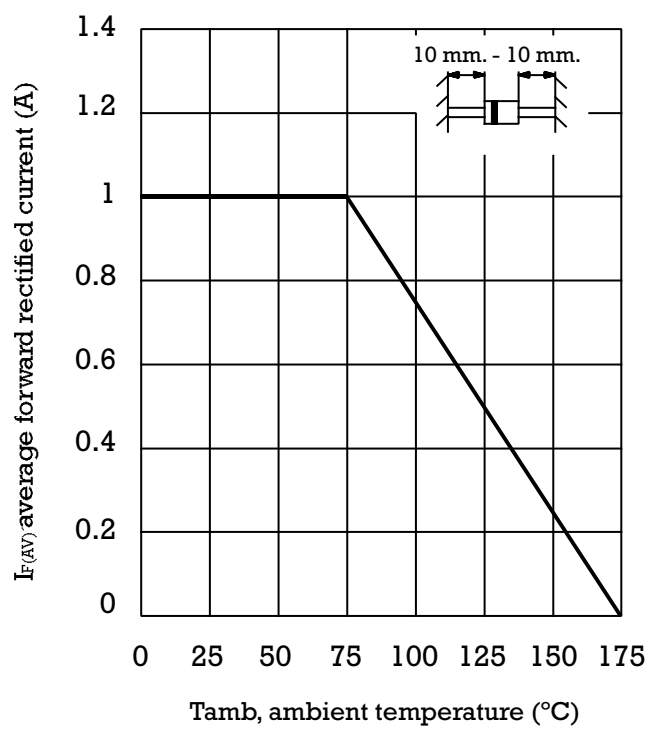
| | | |
|-------------|--|---------------------------------------|
| V_F | Max. forward voltage drop at $I_F = 1\text{ A}$ | 1.1 V |
| I_R | Max. reverse current at V_{RRM} at 25 °C at 125 °C | 5 $\mu\text{ A}$ 50 $\mu\text{ A}$ |
| R_{thj-a} | Thermal resistance (l = 10 mm.) Max. Typ. | 60 °C/W 45 °C/W |

Rating And Characteristic Curves

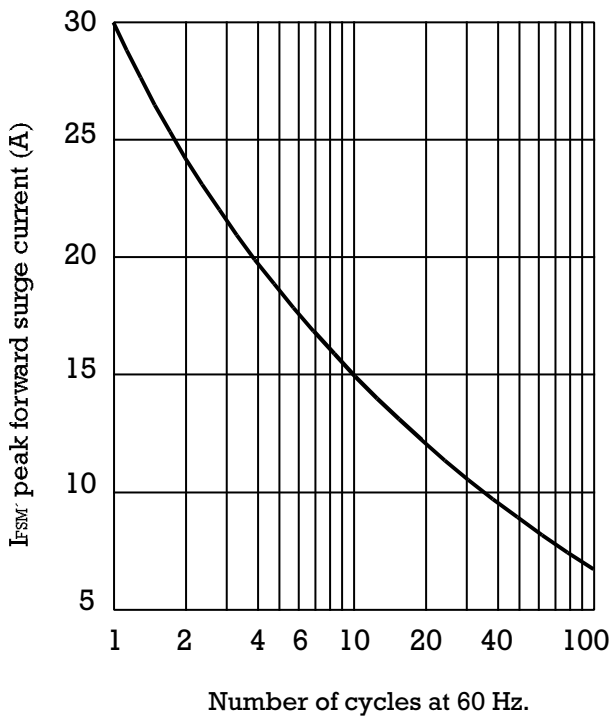
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

