

## 1 Amp. Glass Passivated Fast Recovery Rectifier

<p><b>Dimensions in mm.</b></p> <p><b>DO-41 (Plastic)</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>	<p><b>Voltage</b> 400 to 1000 V.</p> <p><b>Current</b> 1.0 A. at 50 °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

		<b>BA157GP</b>	<b>BA158GP</b>	<b>BA159GP</b>
$V_{RRM}$	Peak recurrent and non recurrent reverse voltage (V)	400	600	1000
$I_{F(AV)}$	Forward current at $T_{amb} = 50\text{ °C}$	1 A		
$I_{FRM}$	Recurrent peak forward current	9 A		
$I_{FSM}$	10 ms. peak forward surge current	35 A		
$t_{rr}$	Max. reverse recovery time from $I_F = 0.5\text{ A}$ $I_R = 1\text{ A}$ $I_{RR} = 0.25\text{ A}$	150 ns	250 ns	500 ns
$T_j$	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 $T_{amb} = 25\text{ °C}$

$V_F$	Forward voltage drop at $I_F = 1\text{ A}$	1.3 V
$I_R$	Reverse current at $V_{RRM}$ at 25 °C at 125 °C	5 $\mu\text{ A}$ 100 $\mu\text{ A}$
$R_{thj-a}$	Thermal resistance (l = 10 mm.) Max. Typ.	60 °C/W 45 °C/W

### Rating And Characteristic Curves

