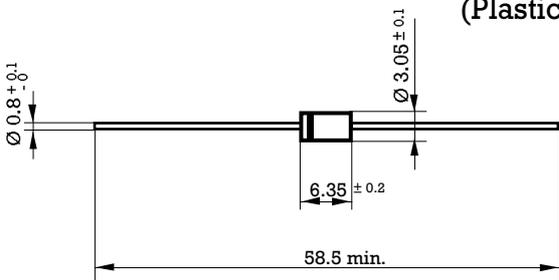


## 1 Amp. Fast Recovery Silicon Diodes

|   |  |
|---|--|
| <p>Dimensions in mm.</p>  <p>DO-15<br/>(Plastic)</p>   | <p><b>Voltage</b><br/>400 to 1000 V.</p> <p><b>Current</b><br/>1.0 A. at 50°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>• <b>Fast Recovery Diodes</b></li> <li>• Diffused 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

|             |   | BA 157           | BA 158 | BA 159 |
|-------------|---|------------------|--------|--------|
| $V_{RRM}$   | Peak recurrent and non recurrent reverse voltage (V)  | 400              | 600    | 1000   |
| $I_{F(AV)}$ | Forward current, R load at $T_{amb} = 50\text{ °C}$   | 1 A              |        |        |
| $I_{FRM}$   | Recurrent peak forward current  | 5 A              |        |        |
| $I_{FSM}$   | 10 ms. peak forward surge current at $T_j = 25\text{ °C}$   | 35 A             |        |        |
| $t_{rr}$    | Max. reverse recovery time from<br>$I_F = 0.5\text{ A}$<br>$I_R = 1\text{ A}$<br>$I_{RR} = 0.25\text{ A}$ | 150 ns           |        | 250 ns |
| $T_j$       | Operating temperature range   | - 65 to + 125 °C |        |        |
| $T_{stg}$   | Storage temperature range   | - 65 to + 125 °C |        |        |

### 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                               | 5 $\mu\text{ A}$         |
| $C_d$       | Capacitance<br>BA 157<br>BA 158<br>BA 159<br>at 1 MHz and $V_{RRM}$ | 2,2 pF<br>2 pF<br>1,8 pF |
| $R_{thj-a}$ | Max. thermal resistance ( $l = 10\text{ mm.}$ )                     | 60° C/W                  |

### Characteristic Curves

