

**1 Amp. Surface Mounted Very Fast Soft Recovery Glass Passivated Avalanche Diode**

|                                 |                                      |   |
|---------------------------------|--------------------------------------|---|
| <p><b>Dimensions in mm.</b></p> | <p><b>CASE:</b><br/>SMA/DO-214AC</p> | <p><b>Voltage</b><br/>200 to 600 V.</p> <p><b>Current</b><br/>1.0 A at 55 °C.</p>   |
|                                 |                                      | <ul style="list-style-type: none"> <li>• <b>Glass Passivated Junction</b></li> <li>• High current capability</li> <li>• The plastic material carries U/L 94 V-0</li> <li>• Low profile package.</li> <li>• Easy pick and place.</li> <li>• High temperature soldering 260 °C 10 sec.</li> </ul> |
|                                 |                                      | <p><b>MECHANICAL DATA</b></p> <p>Terminals: Solder plated, solderable per IEC 68-2-20.<br/>Standard Packaging: 4 mm. tape (EIA-RS-481).<br/>Weight: 0.064 g.</p>  |

**Maximum Ratings, according to IEC publication No. 134**

|                     |   | <b>FES26A</b>    | <b>FES26B</b> | <b>FES26C</b> |
|---------------------|---|------------------|---------------|---------------|
| <b>Marking Code</b> |   | <b>E1</b>        | <b>E2</b>     | <b>E3</b>     |
| $V_{RRM}$           | Peak Recurrent reverse voltage (V)  | 200              | 400           | 600           |
| $V_{RMS}$           | Maximum RMS voltage   | 140              | 280           | 420           |
| $V_{DC}$            | Maximum DC blocking voltage   | 200              | 400           | 600           |
| $I_{F(AV)}$         | Forward current at $T_{amb} = 55\text{ °C}$   | 1 A              |               |               |
| $I_{FRM}$           | Recurrent peak forward current  | 10 A             |               |               |
| $I_{FSM}$           | 10 ms. peak forward surge current<br>(Jedec Method)   | 30 A             |               |               |
| $t_{tr}$            | Max. reverse recovery time from<br>$I_F = 0.5\text{ A}$ ; $I_R = 1\text{ A}$ ; $I_{RR} = 0.25\text{ A}$ | 30 ns            |               |               |
| $V_{BR}$            | Avalanche breakdown voltage at $100\text{ }\mu\text{A}$ (V)   | >300             | >500          | >700          |
| $T_j$               | Operating temperature range   | - 55 to + 150 °C |               |               |
| $T_{stg}$           | Storage temperature range   | - 55 to + 150 °C |               |               |
| $E_{RSM}$           | Maximum non repetitive peak<br>reverse avalanche energy.<br>$I_R = 1\text{ A}$ ; $T_1 = 25\text{ °C}$   | 10 mJ            |               |               |

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

|                            |   |   |
|----------------------------|---|---|
| $V_F$                      | Max. forward voltage drop at $I_F = 1\text{ A}$                                       | at 25 °C<br>2.5 V<br>at 150 °C<br>1.3 V                       |
| $I_R$                      | Max. reverse current at $V_{RRM}$   | at 25 °C<br>5 $\mu\text{A}$<br>at 100 °C<br>100 $\mu\text{A}$ |
| $R_{thj-l}$<br>$R_{thj-a}$ | Typical thermal resistance<br>(5 x 5 mm <sup>2</sup> x 130 $\mu\text{m}$ Copper Area) | 27 °C/W<br>75 °C/W  |

### Rating And Characteristic Curves

