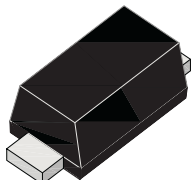


**1.0 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier**

|   |  |
|---|--|
| <p><b>DO-219AA (M1F)</b></p>   | <p><b>Voltage</b><br/>50 to 600 V</p> <p><b>Current</b><br/>1.0 A</p> <p><b>HYPERECTIFIER</b> <sup>®</sup></p> |
| <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Low profile package</li> <li>• Ideal for automated placement</li> <li>• Ultrafast recovery time for high efficiency</li> <li>• Low power losses</li> <li>• Low forward voltage drop</li> <li>• High forward surge current capability</li> <li>• Solder dip 260°C, 10s</li> <li>• Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC</li> <li>• Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C</li> </ul> |  |
| <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• <b>Case:</b> DO-219AA (M1F). Epoxy meets UL 94V-0 flammability rating.</li> <li>• <b>Polarity:</b> Color band denotes cathode end.</li> <li>• <b>Terminals:</b> Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.</li> </ul>  |  |
| <p><b>TYPICAL APPLICATIONS</b></p> <p>Used in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer, automotive and telecommunication.</p>  |  |

Datasheet Company

**Maximun Ratings and Electrical Characteristics at 25°C**

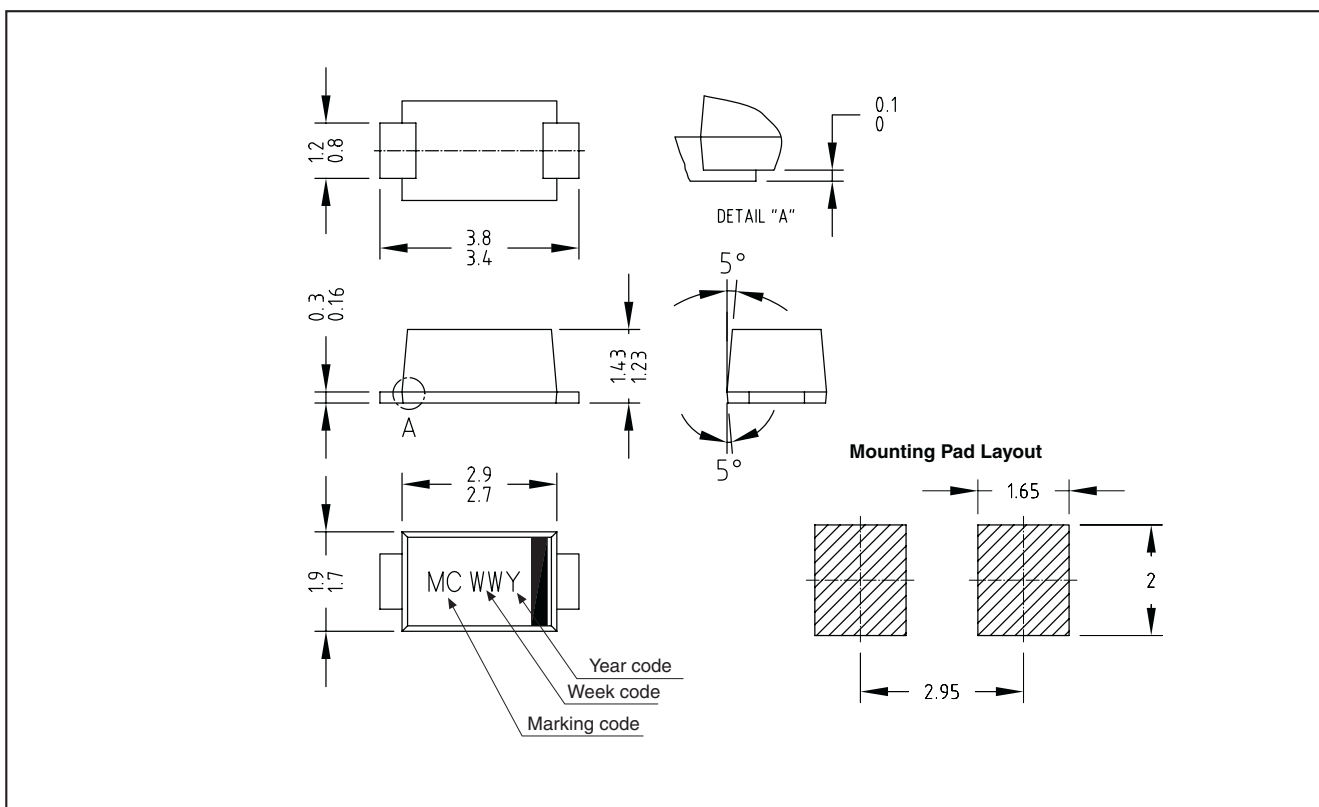
|  |  | FES1AL                         | FES1BL | FES1CL | FES1DL                            | FES1FL | FES1GL | FES1HL | FES1JL |  |
|--|--|--------------------------------|--------|--------|-----------------------------------|--------|--------|--------|--------|--|
| <b>Marking Code</b>                          |  | EAL                            | EBL    | ECL    | EDL                               | EFL    | EGL    | EHL    | EJL    |  |
| V <sub>RRM</sub>                             | Maximum Recurrent Peak Reverse Voltage (V)                           | 50                             | 100    | 150    | 200                               | 300    | 400    | 500    | 600    |  |
| V <sub>RMS</sub>                             | Maximum RMS Voltage (V)  | 35                             | 70     | 105    | 140                               | 210    | 280    | 350    | 420    |  |
| V <sub>DC</sub>                              | Maximum DC Blocking Voltage (V)                                      | 50                             | 100    | 150    | 200                               | 300    | 400    | 500    | 600    |  |
| I <sub>F(AV)</sub>                           | Forward current at T <sub>C</sub> = 120 °C                           | 1.0 A                          |        |        |                                   |        |        |        |        |  |
| I <sub>FSM</sub>                             | 8.3 ms. peak forward surge current (Jedec Method)                    | 30 A                           |        |        |                                   |        |        |        |        |  |
| V <sub>F</sub>                               | Maximum Instantaneous Forward Voltage at 1.0A                        | 0.95 V                         |        |        | 1.3 V                             |        | 1.7 V  |        |        |  |
| I <sub>R</sub>                               | Maximum DC Reverse Current at Rated DC Blocking Voltage              | T <sub>j</sub> = 25 °C<br>5 μA |        |        | T <sub>j</sub> = 100 °C<br>100 μA |        |        |        |        |  |
| T <sub>rr</sub>                              | Maximum Reverse Recovery Time (0.5/1/0.25A)                          | 35 ns                          |        |        |                                   |        |        |        |        |  |
| C <sub>j</sub>                               | Typical Junction Capacitance (1MHz; -4V)                             | 10 pF                          |        |        | 8 pF                              |        |        |        |        |  |
| R <sub>th(j-a)</sub><br>R <sub>th(j-c)</sub> | Maximum Thermal Resistance (5x5 mm <sup>2</sup> x 130 μ Copper Area) | 85 °C/W                        |        |        | 35 °C/W                           |        |        |        |        |  |
| T <sub>j</sub> - T <sub>stg</sub>            | Operating Junction and Storage Temperature Range                     | -55 to + 150 °C                |        |        |                                   |        |        |        |        |  |

**1.0 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier**

**Ordering information**

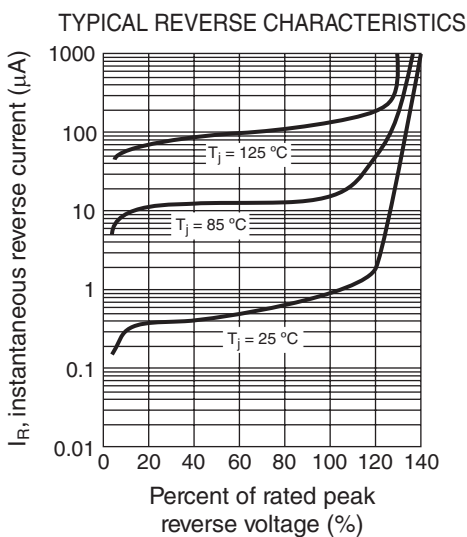
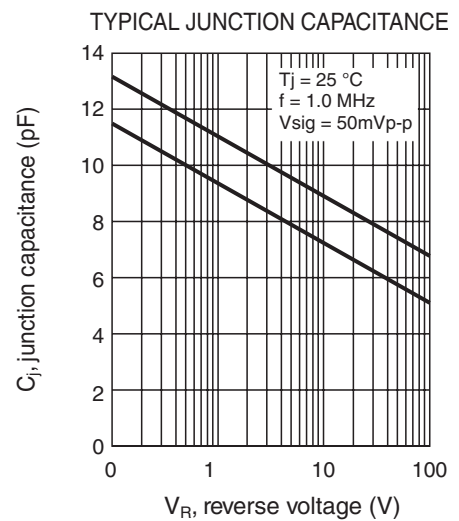
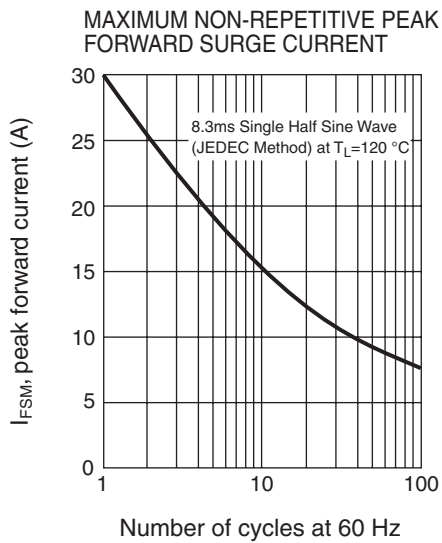
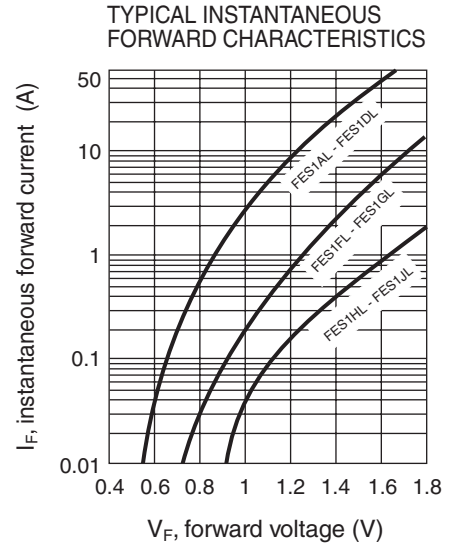
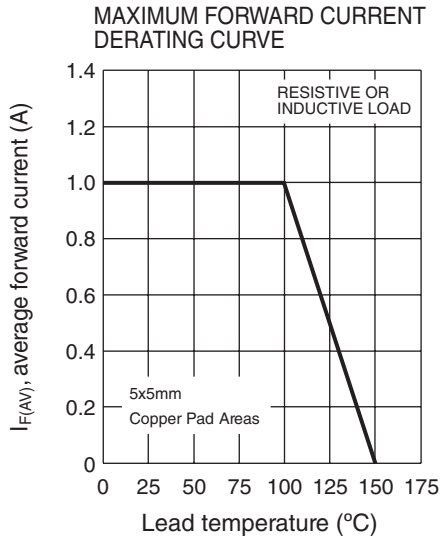
| PREFERRED P/N | PACKAGE CODE | DELIVERY MODE              | BASE QUANTITY | UNIT WEIGHT (g) |
|---------------|--------------|----------------------------|---------------|-----------------|
| FES1DL TRTB   | TRTB         | 13" diameter tape and reel | 7,500         | 0.0196          |
| FES1DL TRTS   | TRTS         | 8" diameter tape and reel  | 1,800         | 0.0196          |

**Package Outline Dimensions: (mm) DO-219AA (M1F)**

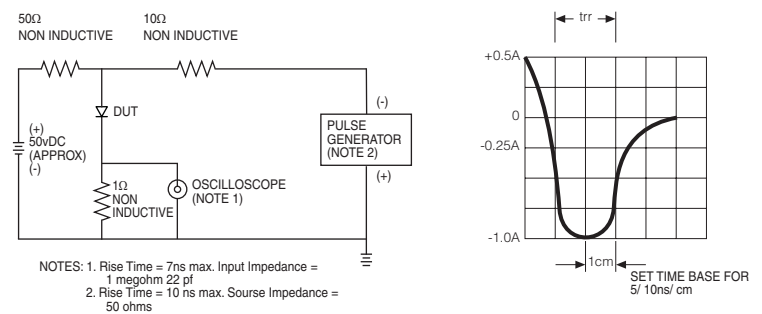


# 1.0 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier

## Ratings and Characteristics (Ta 25 °C unless otherwise noted)



**REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



## 1.0 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier

### Disclaimer

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