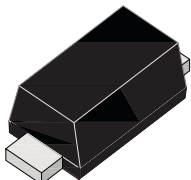




**1.0 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier**

<p><b>DO-219AA / M1F</b></p> 	<p><b>Voltage</b> 50 to 600 V</p> <p><b>Current</b> 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>RoHS COMPLIANT</b></p>	
<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 Factory

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

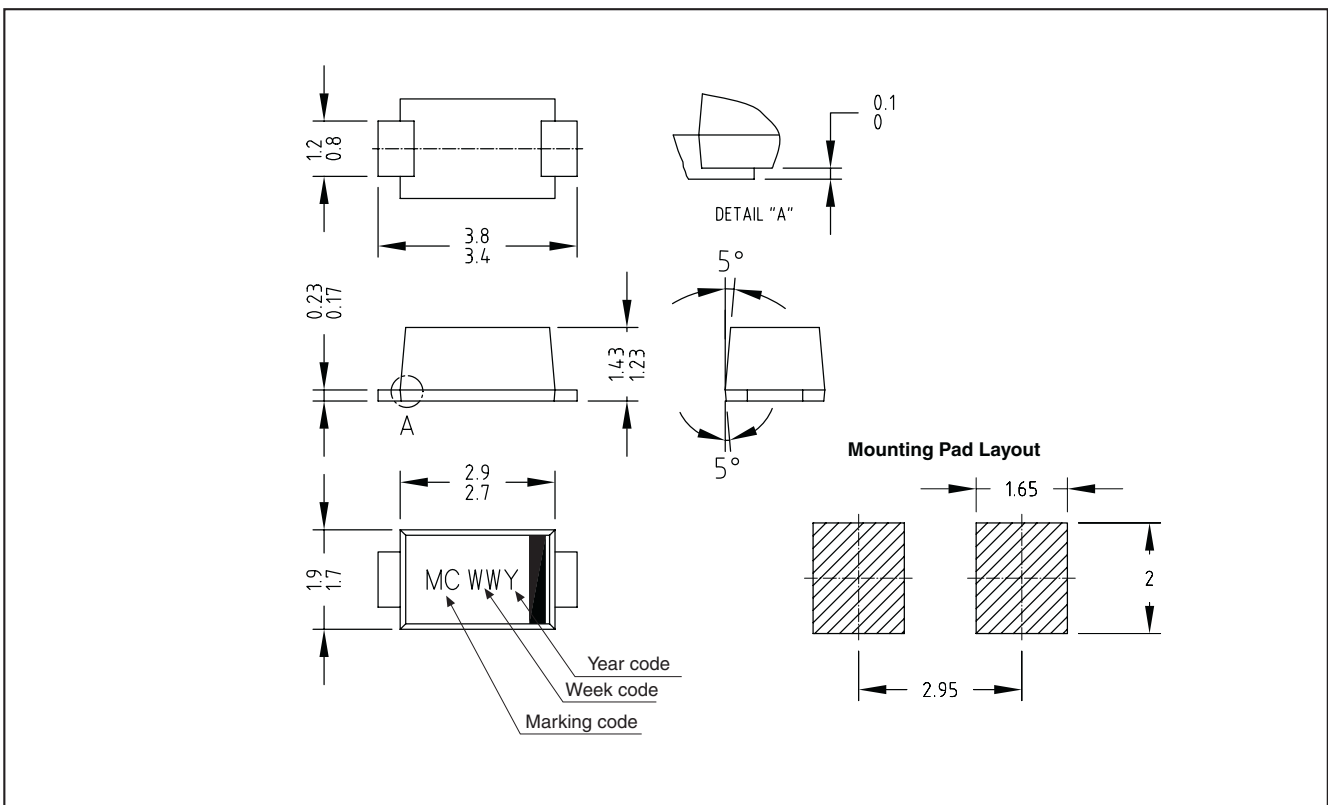
		FES1AL	FES1BL	FES1CL	FES1DL	FES1FL	FES1GL	FES1HL	FES1JL	
<b>Marking Code</b>		EAL	EBL	ECL	EDL	EFL	EGL	EHL	EJL	
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	50	100	150	200	300	400	500	600	
$V_{RMS}$	Maximum RMS Voltage (V)	35	70	105	140	210	280	350	420	
$V_{DC}$	Maximum DC Blocking Voltage (V)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

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

**Ordering information**

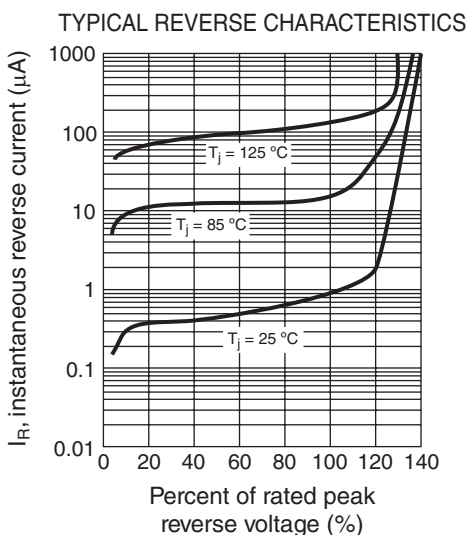
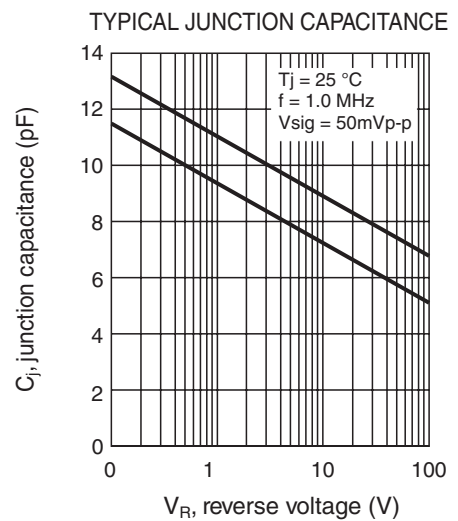
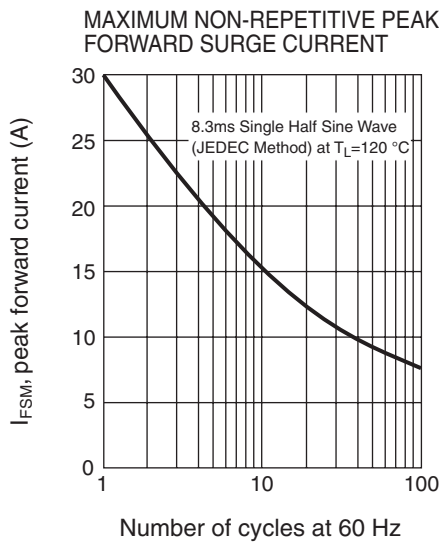
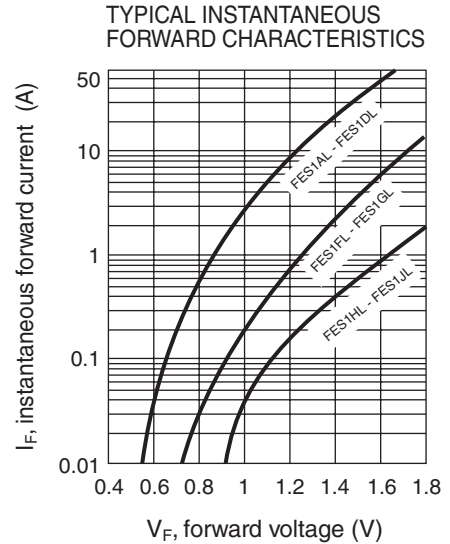
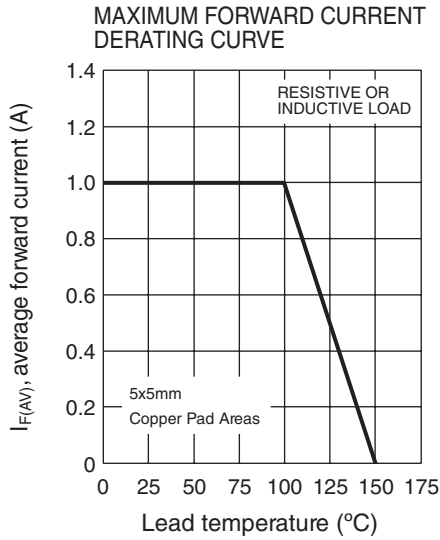
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FES1DL TRTB	TRTB	13" diameter tape and reel	7,500	0.015
FES1DL TRTS	TRTS	8" diameter tape and reel	1,800	0.015

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

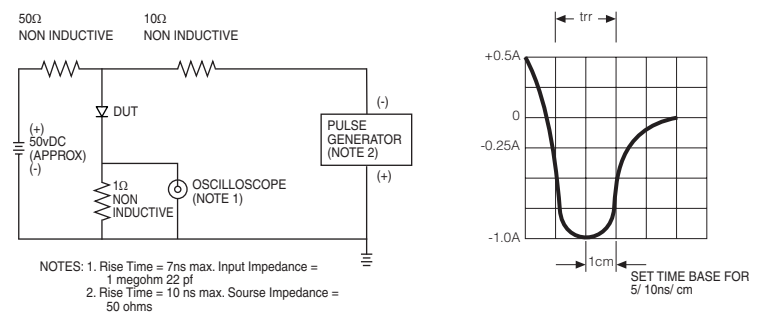


# 1.0 Amp. Surface Mounted Glass Passivated Ultrafast Recovery Rectifier

## 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

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