






**2.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier**

<b>DO-214AA (SMB)</b>  	<b>Voltage</b> 50 to 600 V	<b>Current</b> 2.0 A	
			
	<b>FEATURES</b> <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>• AEC-Q101 qualified</li> <li>• Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC</li> <li>• Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C</li> </ul>		   <b>RoHS COMPLIANT</b>
	<b>MECHANICAL DATA</b> <ul style="list-style-type: none"> <li>• <b>Case:</b> DO-214AA (SMB). 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> <li>• <b>HE3 suffix</b> for high reliability grade, meets JESD 201 class 2 whisker test.</li> </ul>		
<b>TYPICAL APPLICATIONS</b> Used in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer, automotive and telecommunication.			

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

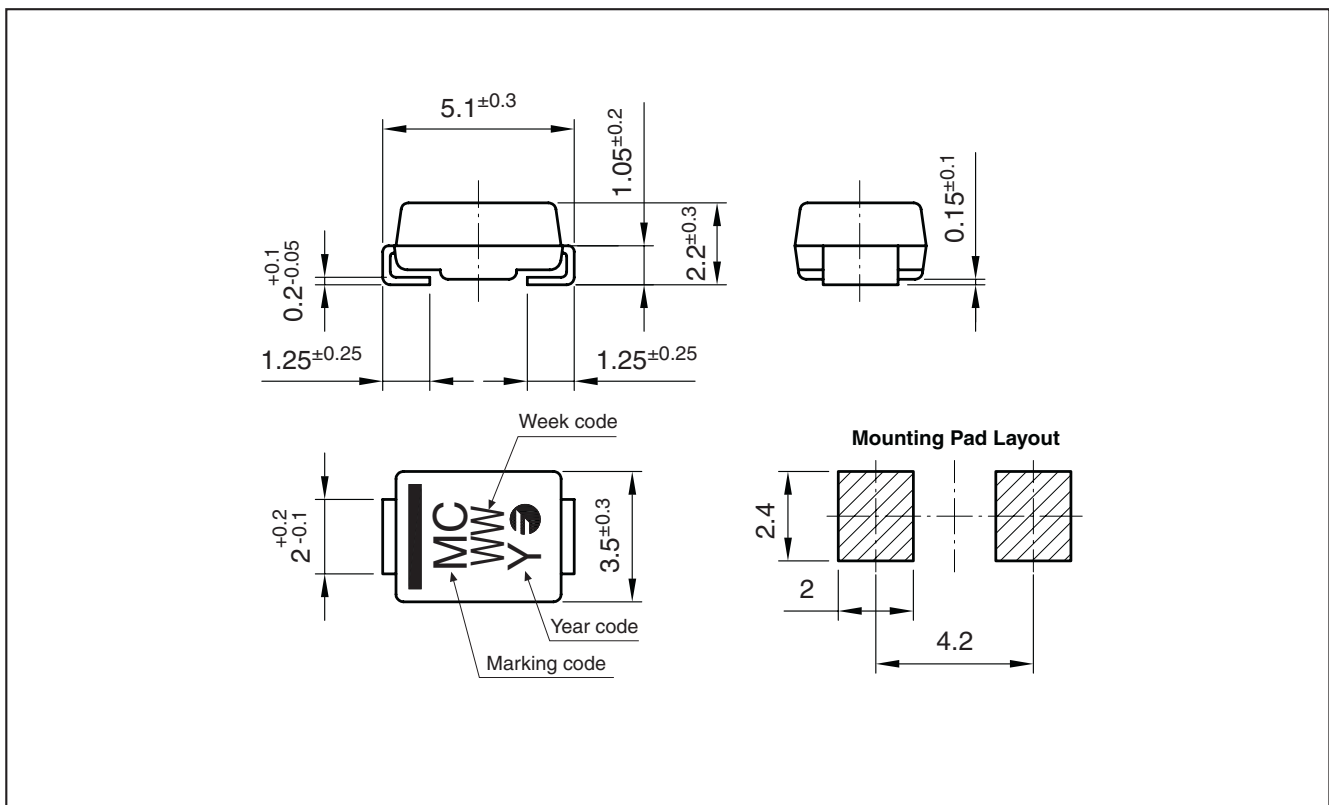
		FES2A	FES2B	FES2D	FES2F	FES2G	FES2J
Marking Code		V1	V2	V3	V4	V5	V6
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200	300	400	600
V <sub>RMS</sub>	Maximum RMS Voltage (V)	35	70	140	210	280	420
V <sub>DC</sub>	Maximum DC Blocking Voltage (V)	50	100	200	300	400	600
I <sub>F(AV)</sub>	Forward current at T <sub>L</sub> = 110 °C	2.0 A					
I <sub>FSM</sub>	8.3 ms. peak forward surge current (Jedec Method)	50 A					
V <sub>F</sub>	Maximum Instantaneous Forward Voltage at 2.0A	0.95 V			1.25 V		
I <sub>R</sub>	Maximum DC Reverse Current T <sub>j</sub> = 25 °C at Rated DC Blocking Voltage T <sub>j</sub> = 100 °C	10 µA 350 µA					
T <sub>rr</sub>	Maximum Reverse Recovery Time (0.5/1/0.25A)	50 ns					
C <sub>j</sub>	Typical Junction Capacitance (1MHz; -4V)	35 pF					
R <sub>th(j-c)</sub> R <sub>th(j-a)</sub>	Maximum Thermal Resistance (5x5 mm <sup>2</sup> x 130 µm Copper Area)	20 °C/W 60 °C/W					
T <sub>j</sub> - T <sub>stg</sub>	Operating Junction and Storage Temperature Range	-55 to + 150 °C					

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**Ordering information**

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FES2J TRTB	TRTB	13" diameter tape and reel	3,200	0.082
FES2J HE3 TRTB	TRTB	13" diameter tape and reel	3,200	0.082

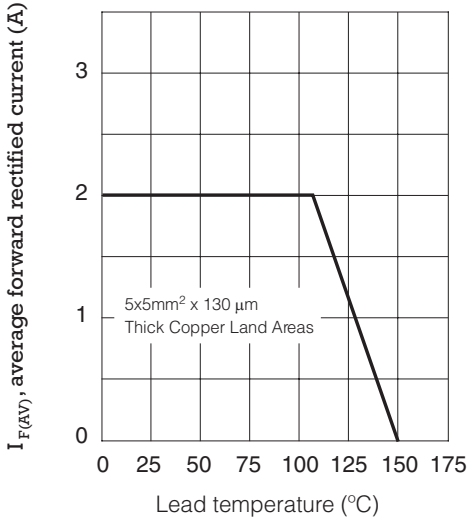
**Package Outline Dimensions: (mm) DO-214AA (SMB)**



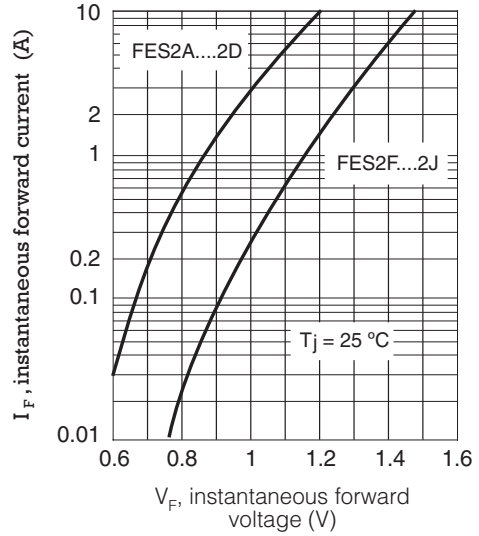
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**Ratings and Characteristics (Ta 25 °C unless otherwise noted)**

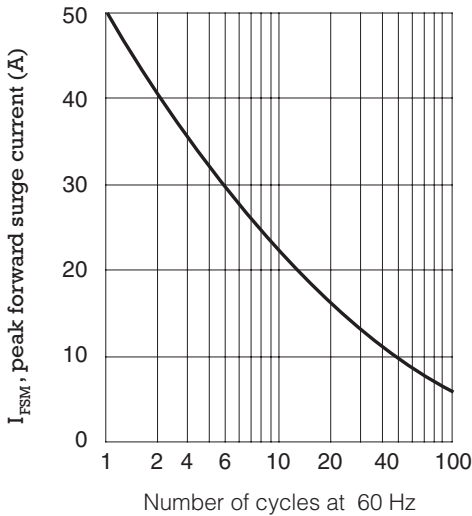
**FORWARD CURRENT DERATING CURVE**



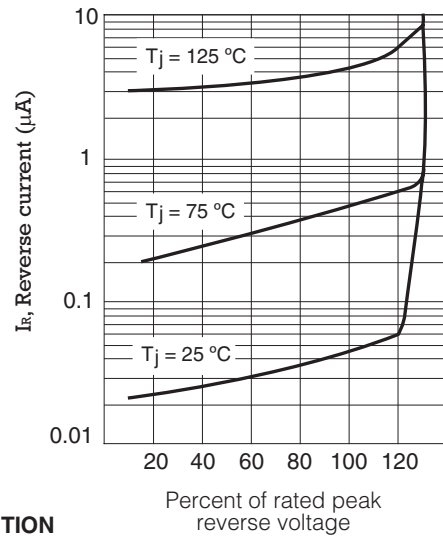
**TYPICAL FORWARD CHARACTERISTIC**



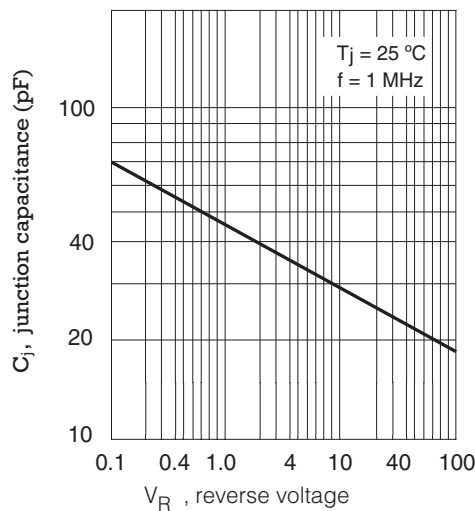
**MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT**



**TYPICAL REVERSE CHARACTERISTIC**



**TYPICAL JUNCTION CAPACITANCE**



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