






2.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier

DO-214AA (SMB) 	Voltage 50 to 600 V	Current 2.0 A	
			
	FEATURES <ul style="list-style-type: none"> • Low profile package • Ideal for automated placement • Ultrafast recovery time for high efficiency • Low power losses • Low forward voltage drop • High forward surge current capability • Solder dip 260°C, 10s • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC • Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C 		   RoHS COMPLIANT
	MECHANICAL DATA <ul style="list-style-type: none"> • Case: DO-214AA (SMB). Epoxy meets UL 94V-0 flammability rating. • Polarity: Color band denotes cathode end. • Terminals: 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. • HE3 suffix for high reliability grade, meets JESD 201 class 2 whisker test. 		
TYPICAL APPLICATIONS 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

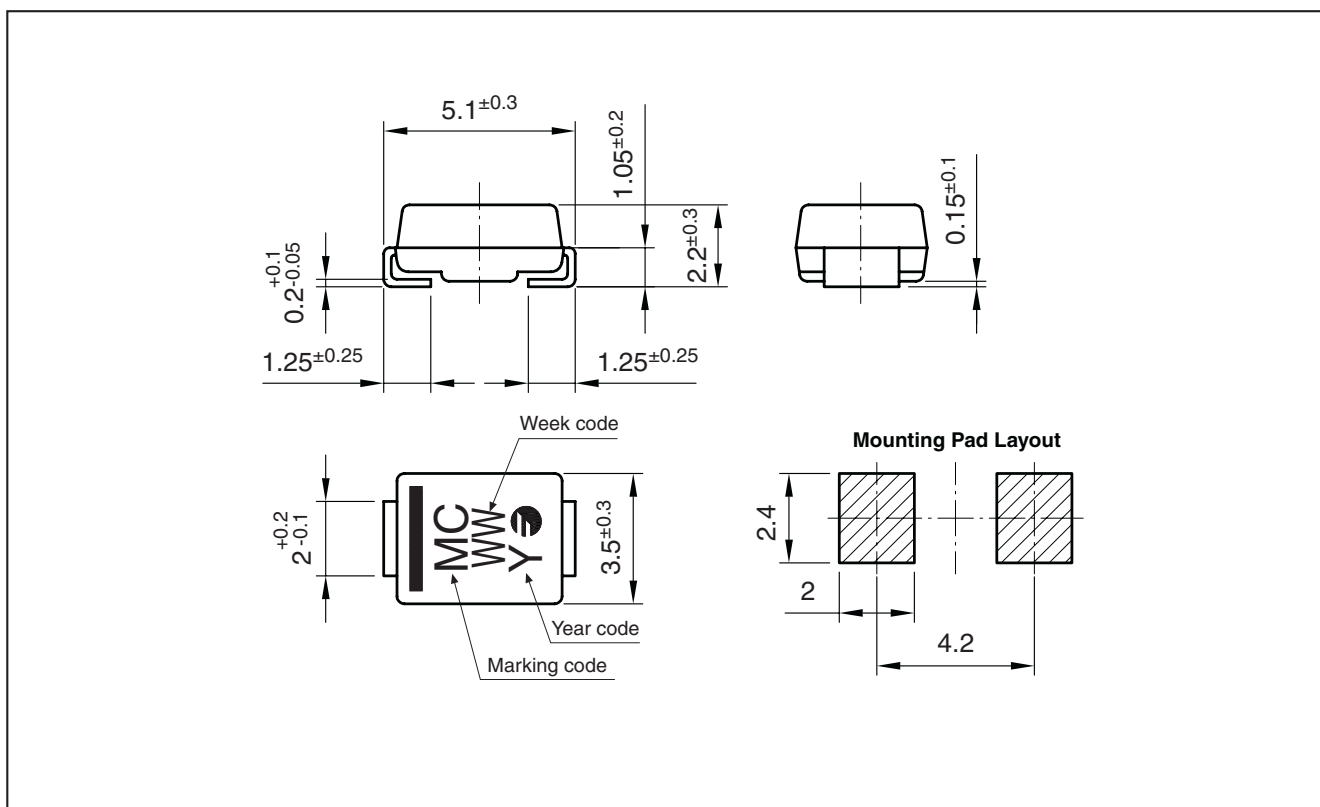
		FES2A	FES2B	FES2D	FES2F	FES2G	FES2J
Marking Code		V1	V2	V3	V4	V5	V6
V _{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200	300	400	600
V _{RMS}	Maximum RMS Voltage (V)	35	70	140	210	280	420
V _{DC}	Maximum DC Blocking Voltage (V)	50	100	200	300	400	600
I _{F(AV)}	Forward current at T _L = 110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

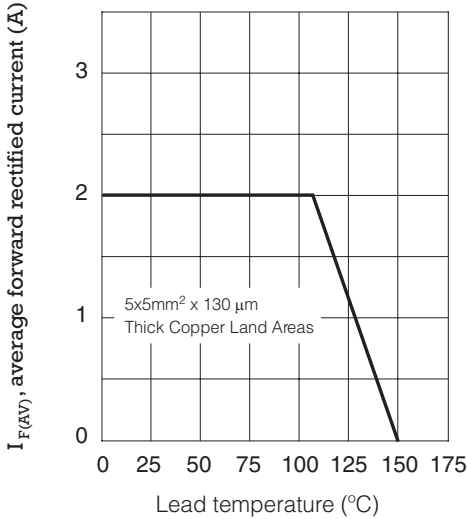
Package Outline Dimensions: (mm) DO-214AA (SMB)



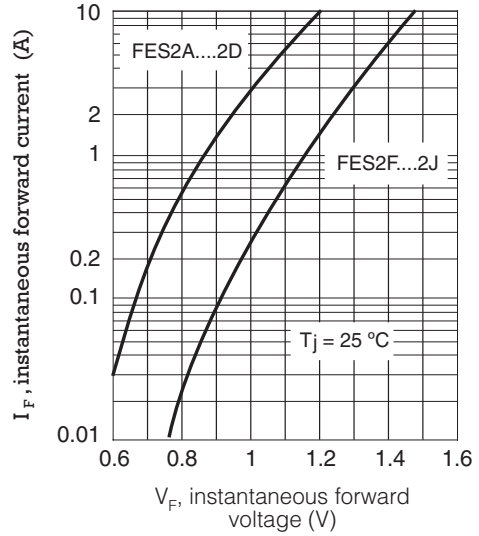
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

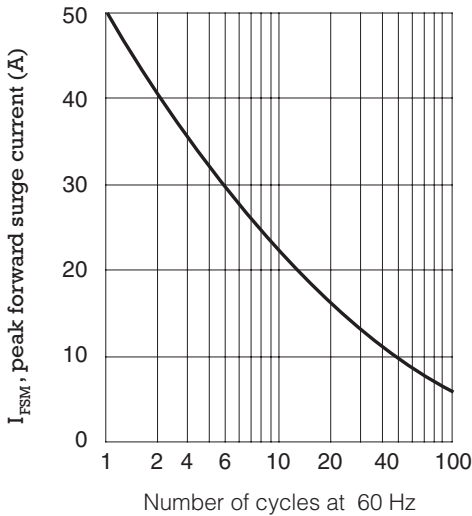
FORWARD CURRENT DERATING CURVE



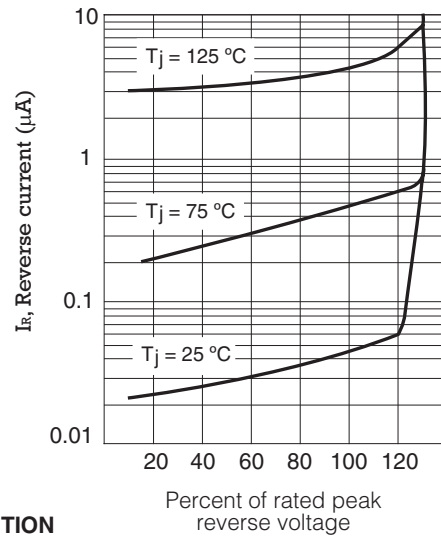
TYPICAL FORWARD CHARACTERISTIC



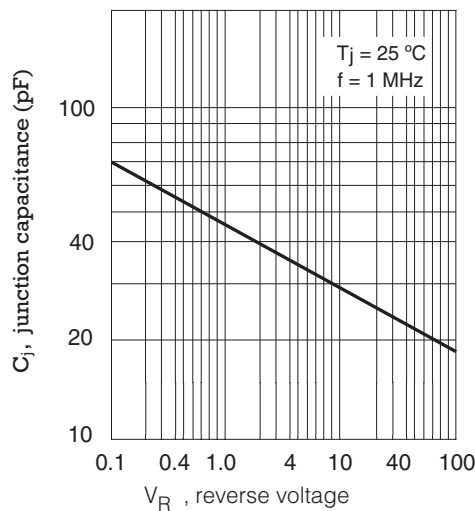
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE



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