






3.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier

DO-214AB (SMC) 	Voltage 50 to 1000 V	Current 3.0 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-214AB (SMC). 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.			

Maximum Ratings and Electrical Characteristics at 25°C

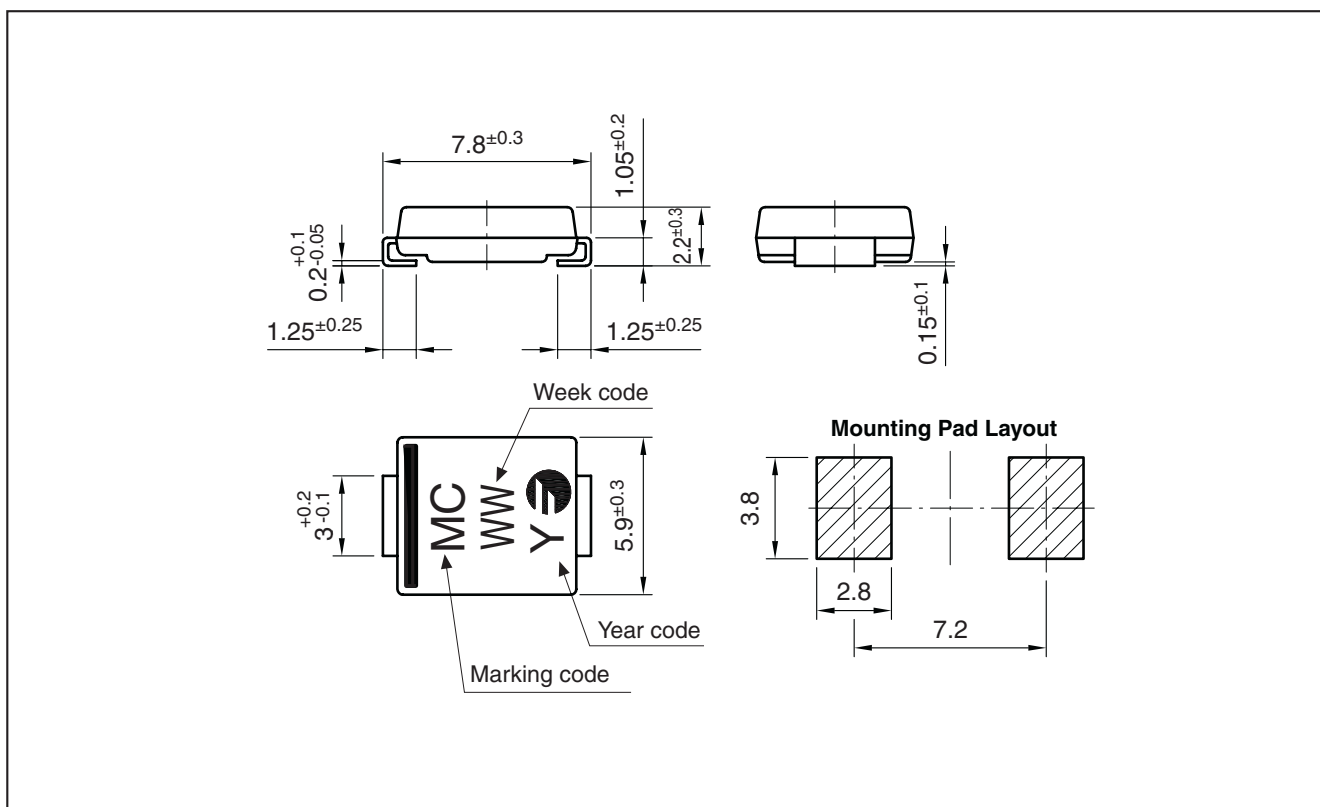
Marking Code		FUF3A	FUF3B	FUF3D	FUF3G	FUF3J	FUF3K	FUF3M
		AAA	AAB	AAD	AAG	AAJ	AAK	AAM
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	35	70	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward current at $T_L = 75^\circ C$	3.0 A						
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	150 A						
V_F	Maximum Instantaneous Forward Voltage at 3.0 A	1.3V				1.7V		
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_j = 25^\circ C$		$T_j = 100^\circ C$				
		5 μA				100 μA		
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	50 ns				75 ns		
C_j	Typical Junction Capacitance (1MHz; -4V)	45 pF						
$R_{th(j-c)}$	Typical Thermal Resistance	13 $^\circ C/W$						
$R_{th(j-a)}$	(8x8 mm ² x 130 μm Copper Area)	47 $^\circ C/W$						
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 $^\circ C$						

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Ordering information

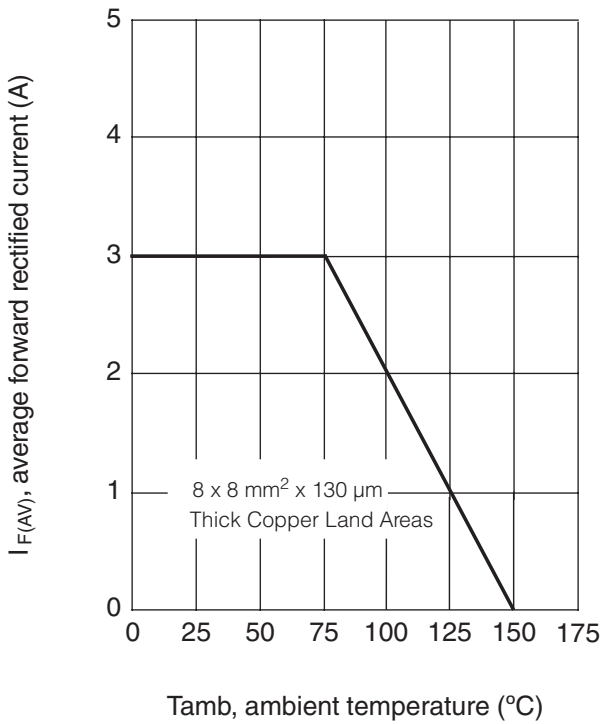
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FUF3D TRTB	TRTB	13" diameter tape and reel	3,500	0.201
FUF3D HE3 TRTB	TRTB	13" diameter tape and reel	3,500	0.201
FUF3D TRTS	TRTS	7" diameter tape and reel	850	0.201

Package Outline Dimensions: (mm) DO-214AB (SMC)

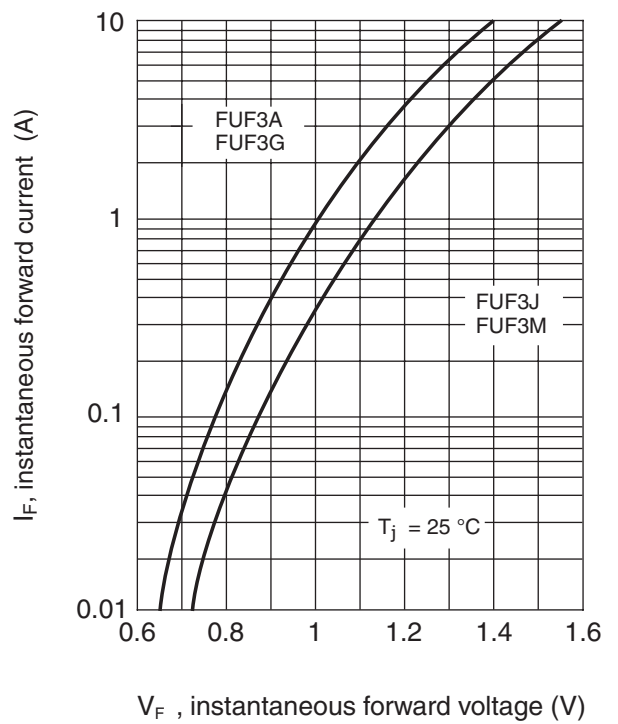


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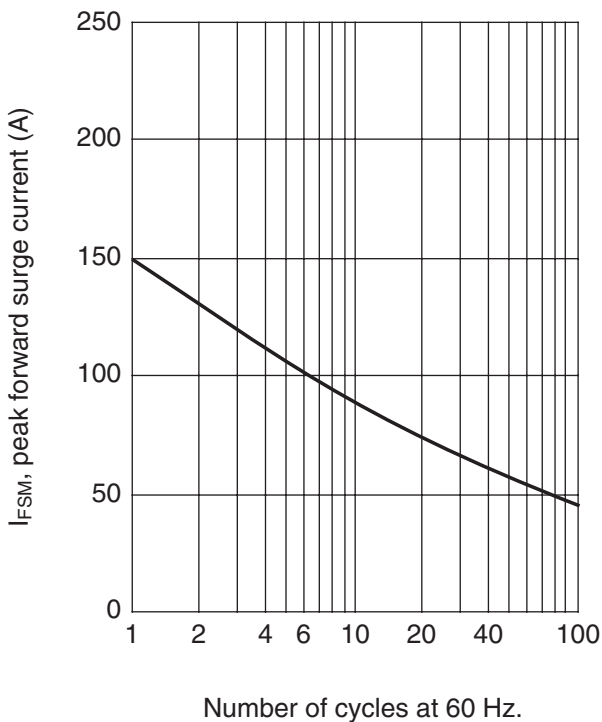
FORWARD CURRENT DERATING CURVE



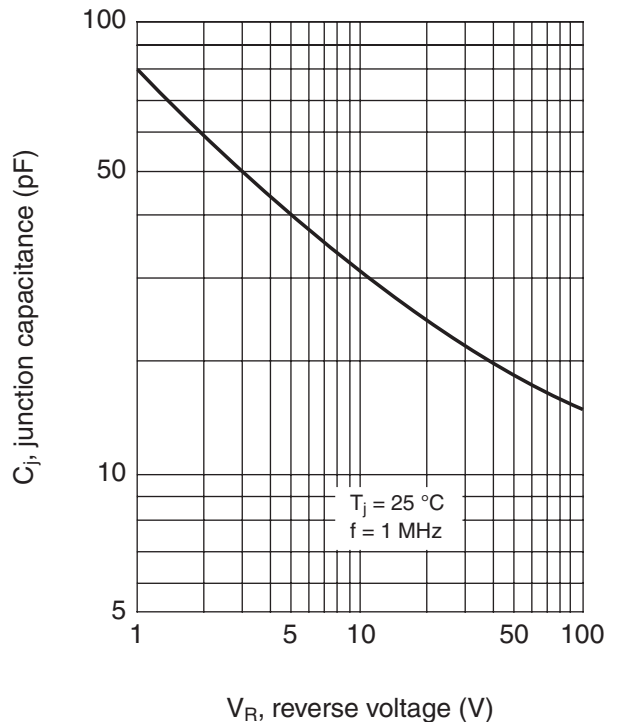
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



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