






3.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier

DO-214AB (SMC) 	Voltage 200 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 <div style="text-align: right;">    RoHS COMPLIANT </div>
	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

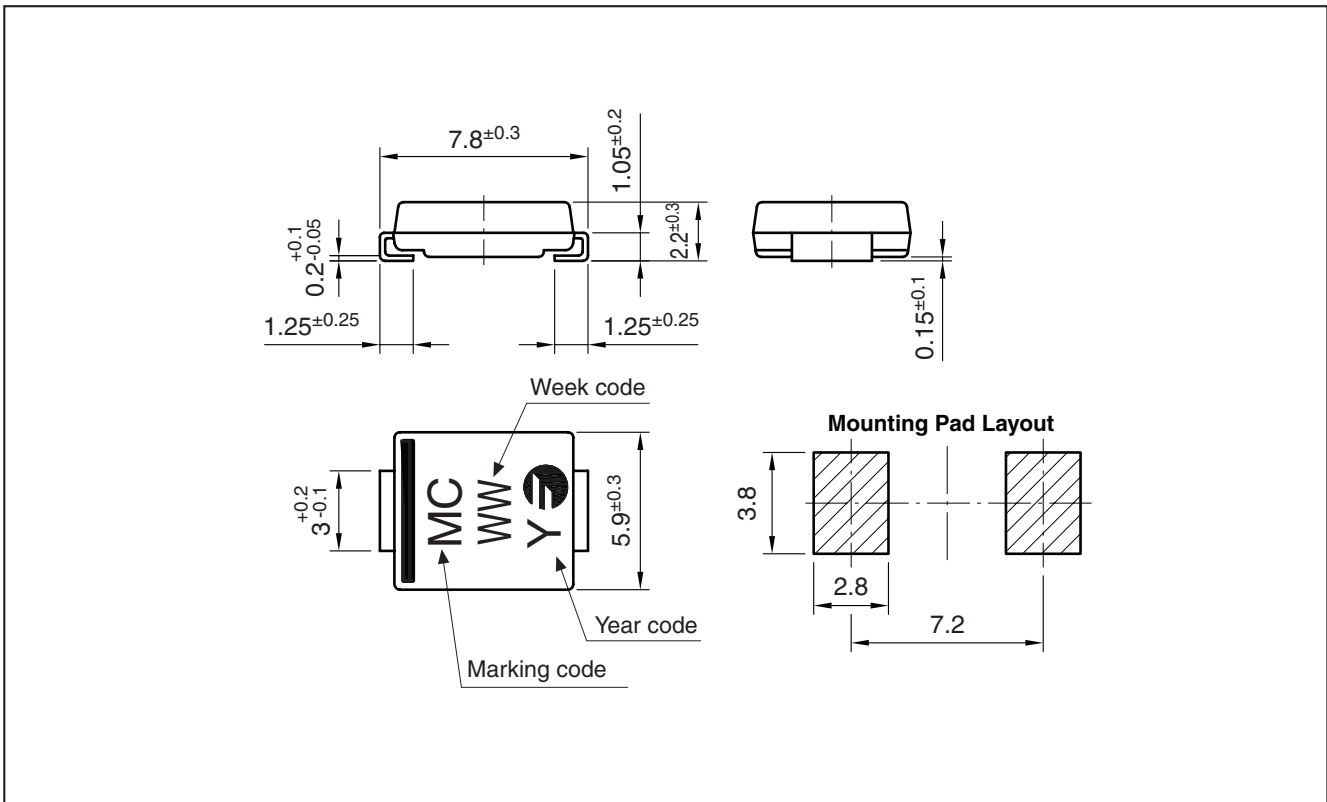
Marking Code		FES3DT
		W7
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200
V_{RMS}	Maximum RMS Voltage (V)	140
V_{DC}	Maximum DC Blocking Voltage (V)	200
$I_{F(AV)}$	Forward current at $T_L = 100\text{ °C}$	3.0 A
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	100 A
V_F	Maximum Instantaneous Forward Voltage at 3.0A	0.90 V
I_R	Maximum DC Reverse Current $T_j = 25\text{ °C}$ at Rated DC Blocking Voltage $T_j = 175\text{ °C}$	1 μ A 100 μ A
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	35 ns
C_j	Typical Junction Capacitance (1MHz; -4V)	45 pF
$R_{th(j-c)}$ $R_{th(j-a)}$	Maximum Thermal Resistance (8x8 mm ² x 130 μ m Copper Area)	12 °C/W 47 °C/W
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 175 °C

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Ordering information

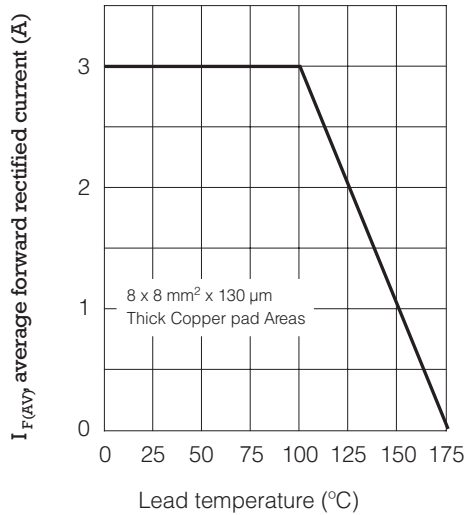
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FES3DT TRTB	TRTB	13" diameter tape and reel	3,500	0.201
FES3DT HE3 TRTB	TRTB	13" diameter tape and reel	3,500	0.201

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

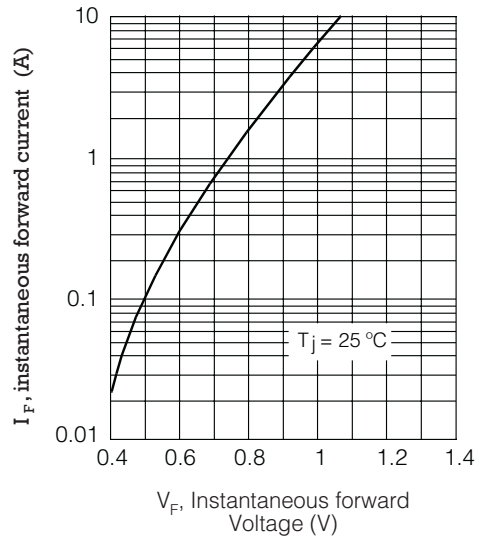


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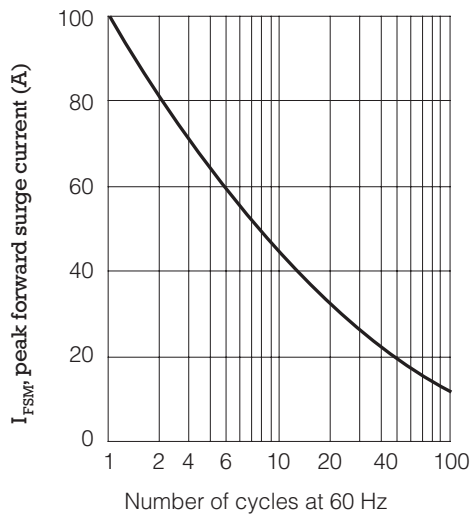
FORWARD CURRENT DERATING CURVE



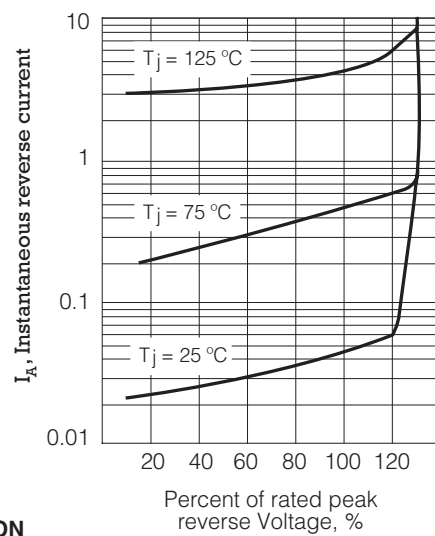
TYPICAL FORWARD CHARACTERISTIC



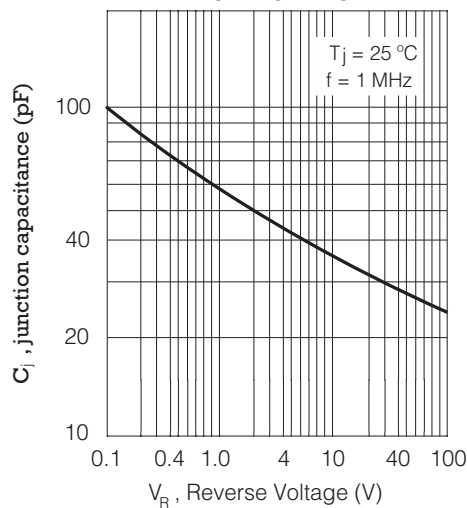
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE



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