






3.0 Amp. Surface Mount Glass Passivated Ultrafast Recovery Rectifier

DO-214AA (SMB) 	Voltage 600 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-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

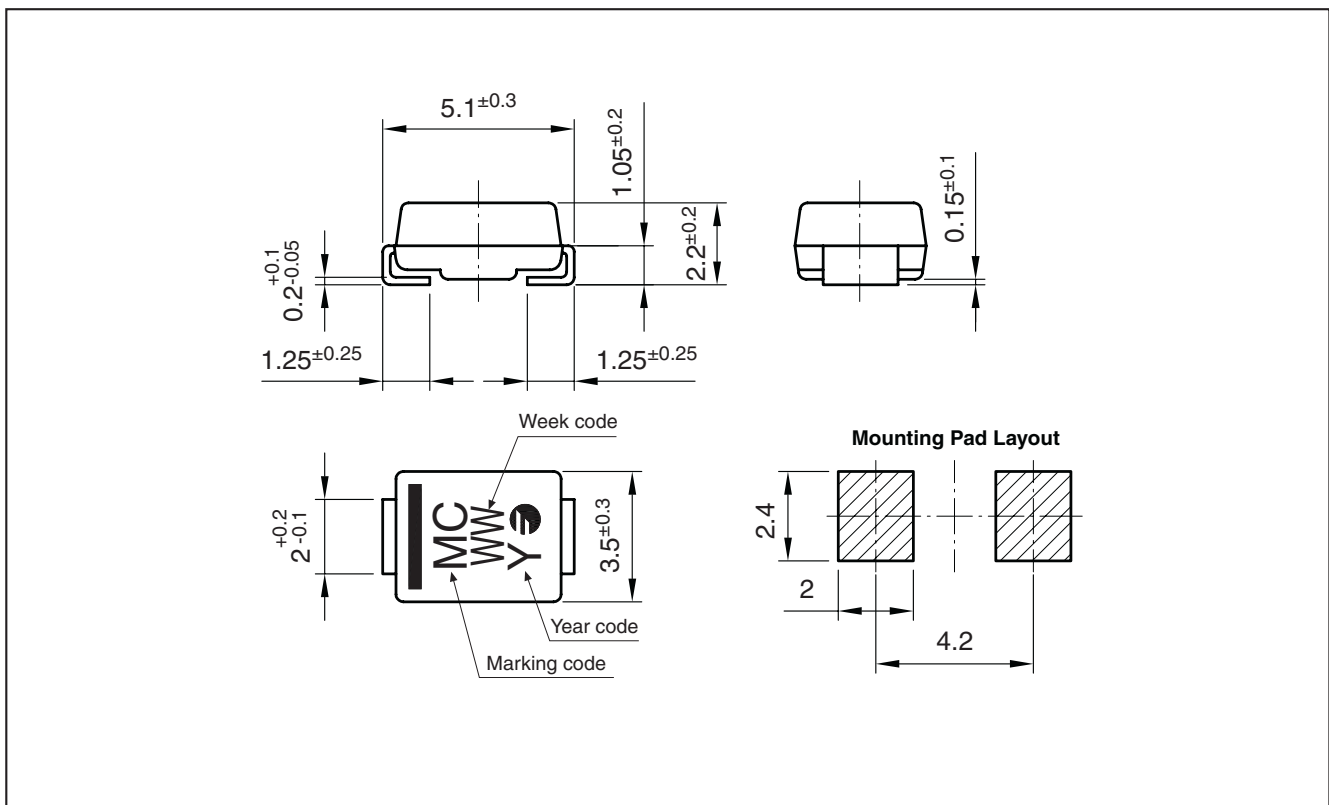
		FURS360B
Marking Code		V7
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	600
V_{RMS}	Maximum RMS Voltage (V)	420
V_{DC}	Maximum DC Blocking Voltage (V)	600
$I_{F(AV)}$	Forward current at $T_C = 105^\circ\text{C}$	3.0 A
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	100 A
V_F	Maximum Instantaneous Forward Voltage at 3.0A	at 25 °C: 1.25 V at 150 °C: 1.05 V
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_j = 25^\circ\text{C}$: 3 μA $T_j = 150^\circ\text{C}$: 150 μA
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	50 ns
$R_{th(j-c)}$ $R_{th(j-a)}$	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	-65 to + 175 °C
E_{RSM}	Maximum non repetitive peak reverse Avalanche Energy $T_j = 25^\circ\text{C}$, $I_{(BR)R} = 1\text{A}$	12 mJ

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Ordering information

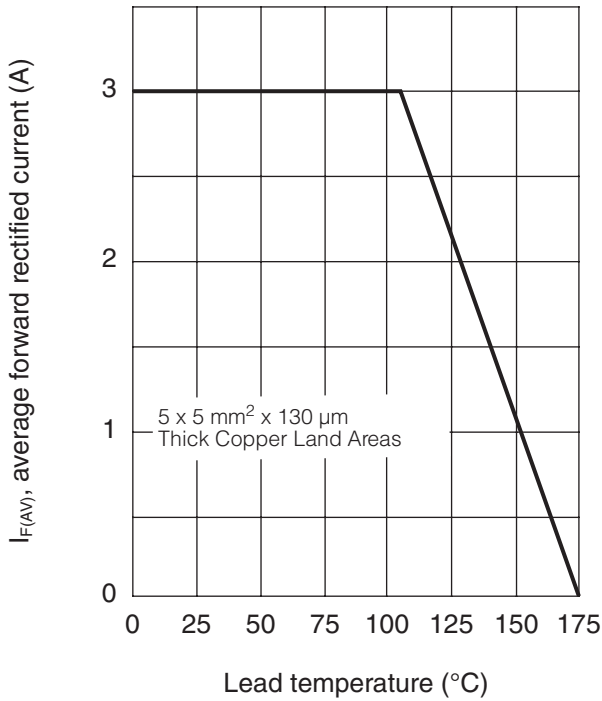
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FURS360B TRTB	TRTB	13" diameter tape and reel	3,200	0.095
FURS360B HE3 TRTB	TRTB	13" diameter tape and reel	3,200	0.095

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

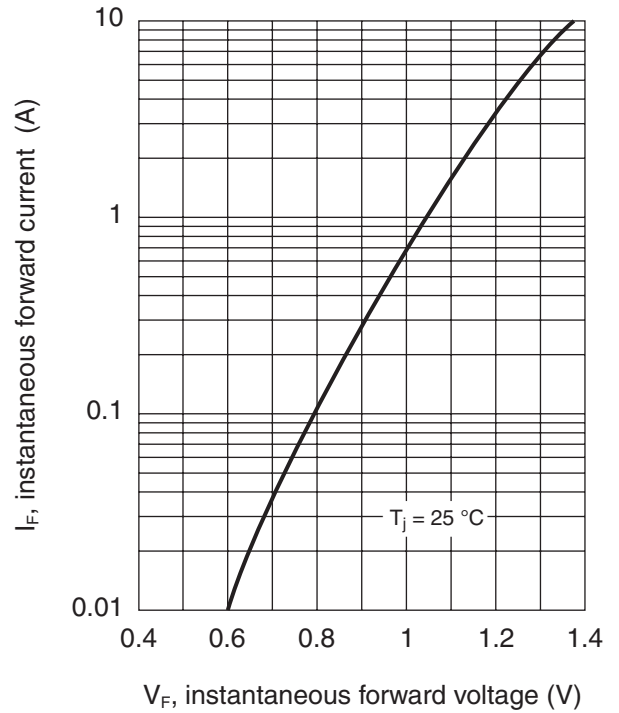


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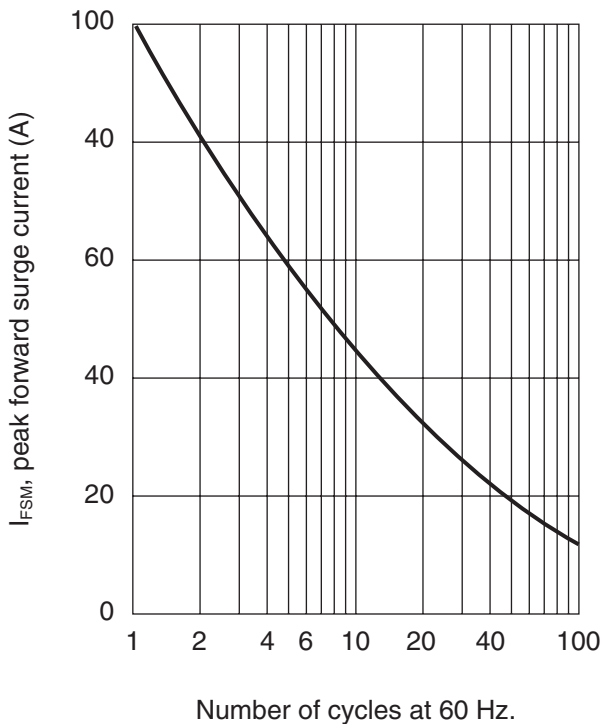
FORWARD CURRENT DERATING CURVE



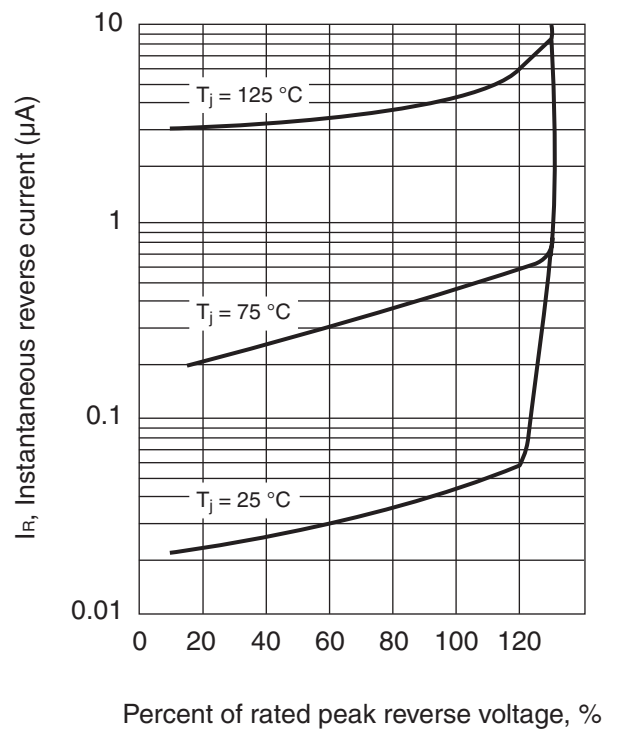
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



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Revision History

Date	Revision	Description of Changes
15-Jan-2013	0	Original Data Sheet
9-Dec-2013	1	Included ERSM
13-Nov-2015	2	Included HE3 version

Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.

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