

3.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

<p>DO-201AD (DO-27)</p> 	<p>Voltage 50V to 1000V</p>	<p>Current 3 A at 55 °C</p>	
			
	<p>FEATURES</p> <ul style="list-style-type: none"> • 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
	<p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: DO-201AD (DO-27). 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. 		
<p>TYPICAL APPLICATIONS</p> <p>Used in high frequency rectifier of switching mode power supplies, inverters, freewheeling diodes, dc-to-dc converters, and other power switching application.</p>			

Maximun Ratings and Electrical Characteristics at 25 °C

Marking Code		FUF 5400	FUF 5401	FUF 5402	FUF 5404	FUF 5406	FUF 5407	FUF 5408
V _{RRM}	Peak recurrent 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 Tamb = 55 °C	3 A						
I _{FRM}	Recurrent peak forward current	30 A						
I _{FSM}	8.3 ms. peak forward surge current (Jedec Method)	150 A						
t _{rr}	Max. reverse recovery time from I _F = 0.5 A ; I _R = 1 A ; I _{RR} = 0.25 A	50 ns				75 ns		
C _j	Typical Junction Capacitance at 1 MHz and reverse voltage of 4V _{DC}	45 pF						
T _j	Operating temperature range	- 65 to + 150 °C						
T _{stg}	Storage temperature range	- 65 to + 150 °C						
E _{RSM}	Maximum non repetitive peak reverse avalanche energy. I _R = 1 A ; T _j = 25 °C	20 mJ						

Electrical Characteristics at Tamb = 25 °C

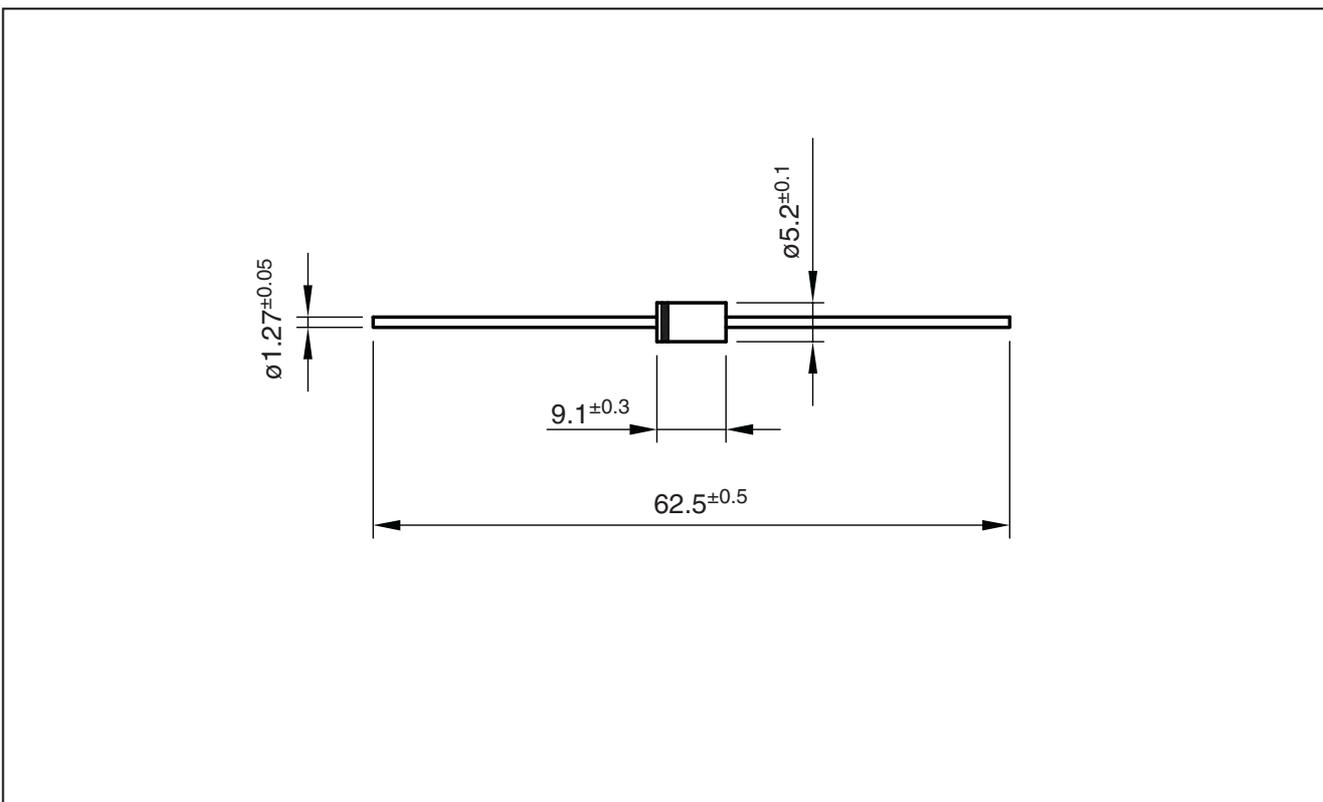
V _F	Max. forward voltage drop at I _F = 3 A	1.3 V	1.7 V
I _R	Max. reverse current at V _{RRM} at 25 °C	5 µA	
R _{thj-a}	Max. thermal resistance (l = 10 mm.)	30 °C/W	

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FUF5404 AMP	AMP	AMMO BOX	1,500	1.100
FUF5404 TR	TR	13" diameter tape and reel	1,500	1.100

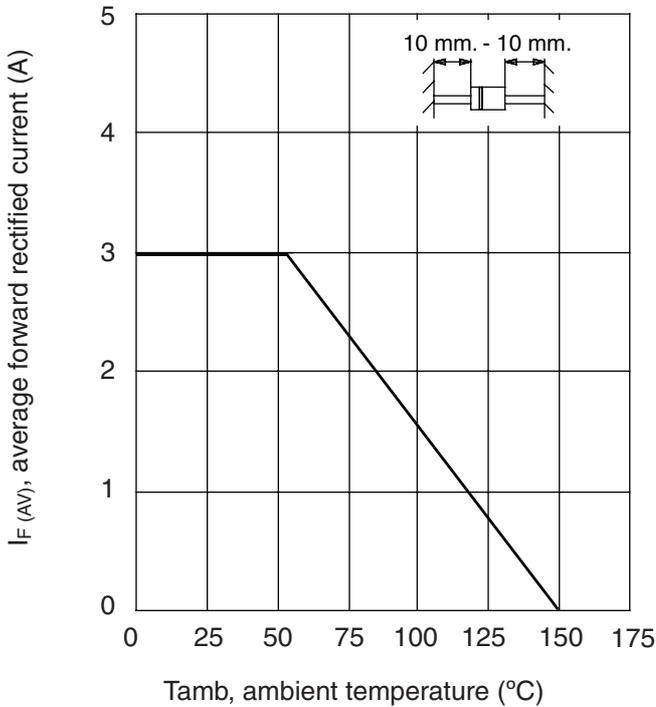
Package Outline Dimensions: (mm) DO-201AD (DO-27)



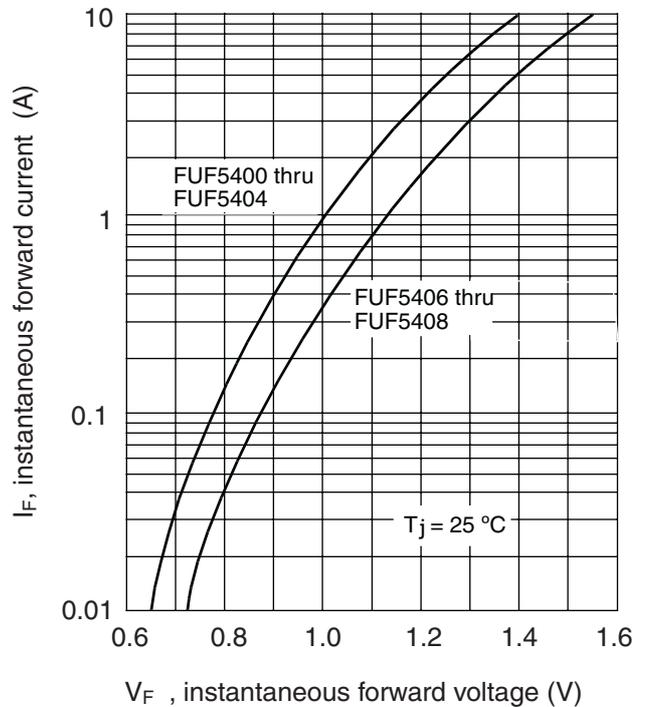
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

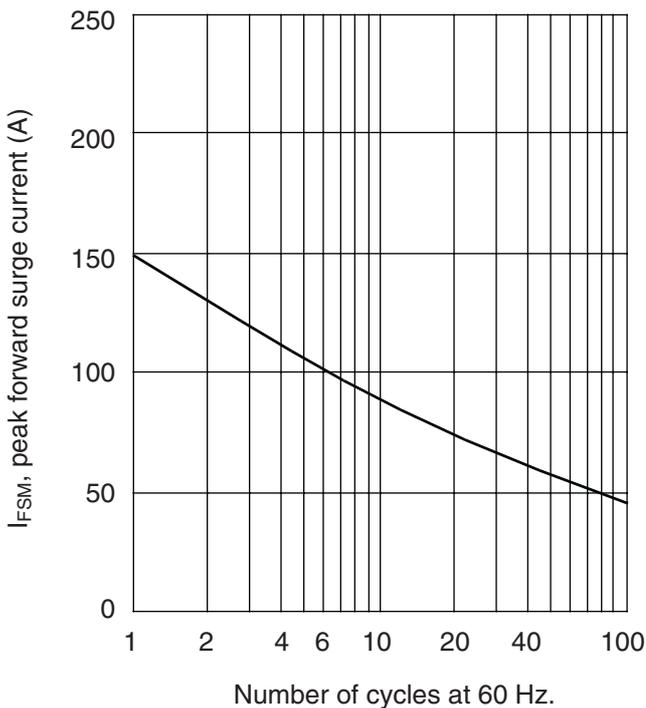
FORWARD CURRENT DERATING CURVE



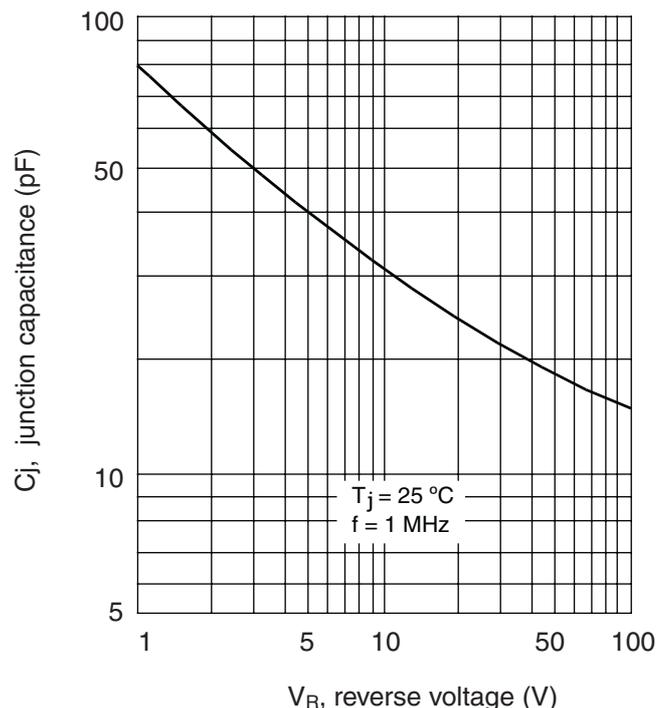
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



3.0 Amp. Glass Passivated Ultrafast Recovery Rectifier**Revision History**

Date	Revision	Description of Changes
Sep-1998	0	Original Data Sheet
Jun-2016	1	Format update

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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