





1.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

<p>DO-204AL (DO-41)</p> 	<p>Voltage 50V to 1000V</p>	<p>Current 1 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-204AL (DO-41). 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 4001	FUF 4002	FUF 4003	FUF 4004	FUF 4005	FUF 4006	FUF 4007
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	1.0 A						
I _{FRM}	Recurrent peak forward surge current	10 A						
I _{FSM}	8.3 ms. peak forward surge current (Jedec Method)	30 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}	15 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 = 0.5 A ; T _j = 25 °C	20 mJ						

Electrical Characteristics at Tamb = 25 °C

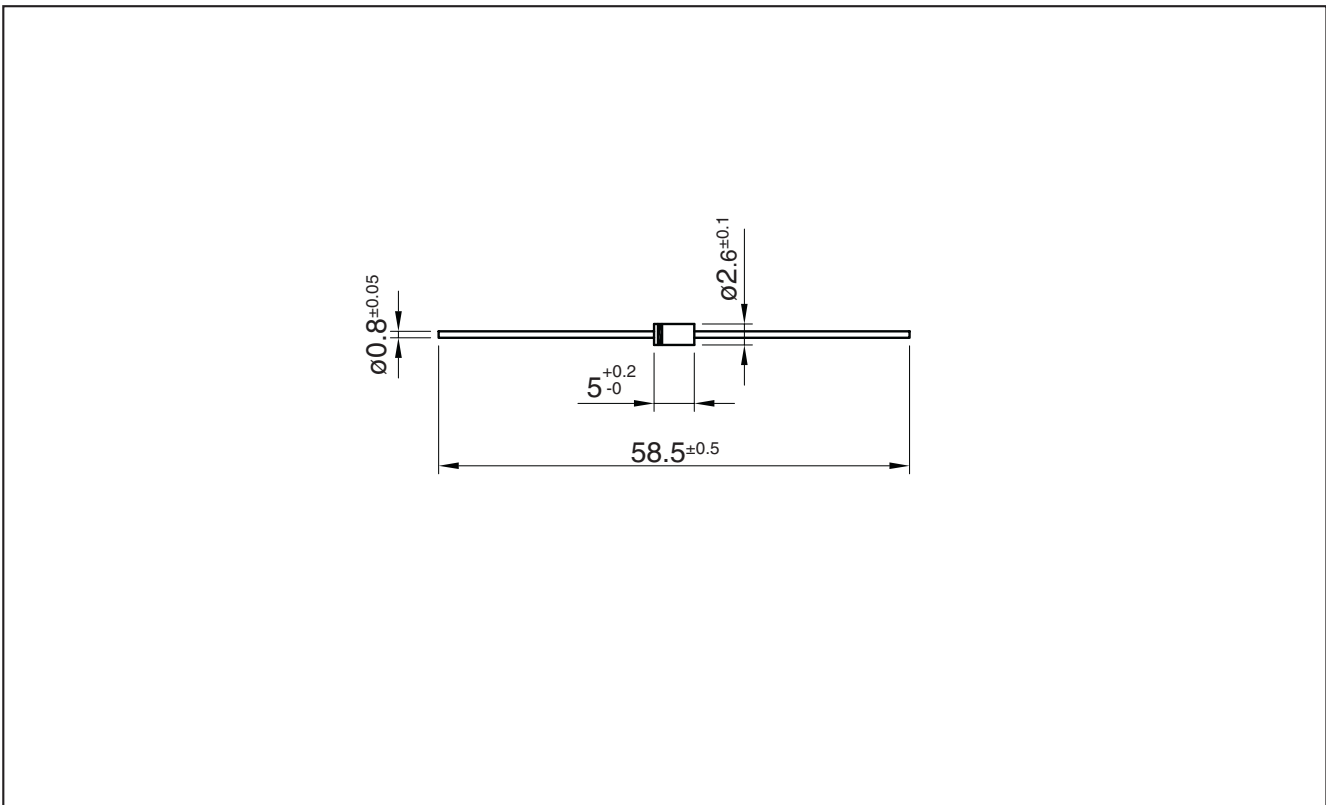
V _F	Maximum forward voltage drop at I _F = 1 A	1.3 V	1.7 V
I _R	Max. reverse current at V _{RRM} at 25 °C	5 µA	
R _{th(j-a)}	Max. thermal resistance (l = 10mm)	50 °C/W	

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FUF4002 AMP	AMP	AMMO BOX	5,000	0.325
FUF4002 TR	TR	14" diameter tape and reel	5,000	0.325

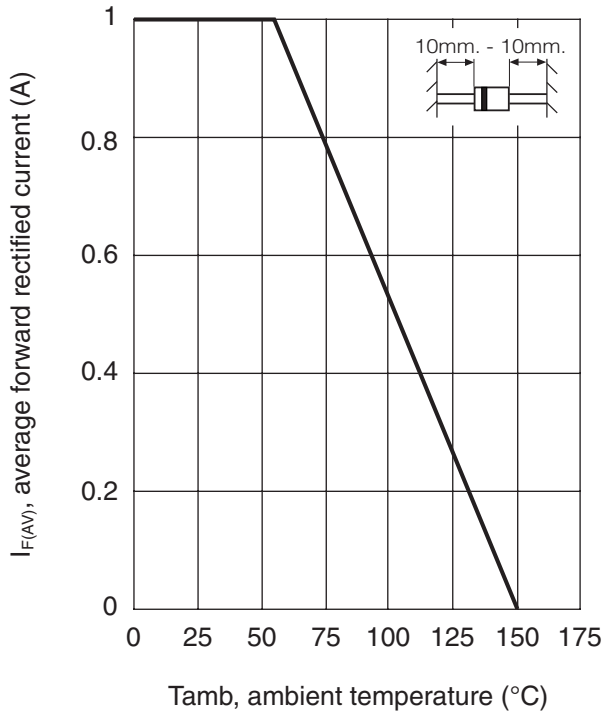
Package Outline Dimensions: (mm) DO-204AL (DO-41)



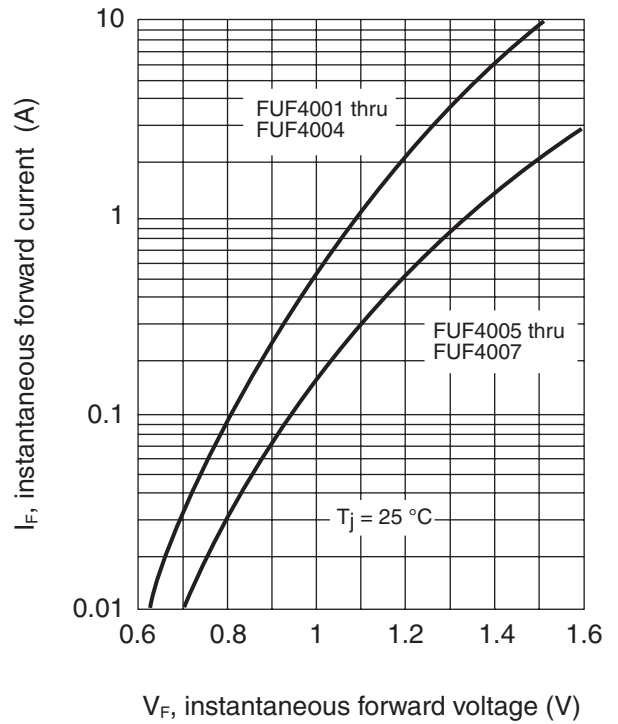
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

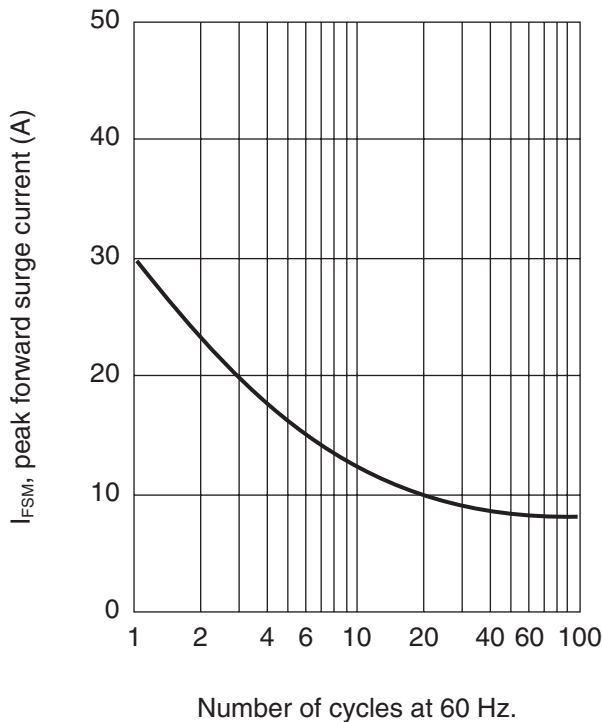
FORWARD CURRENT DERATING CURVE



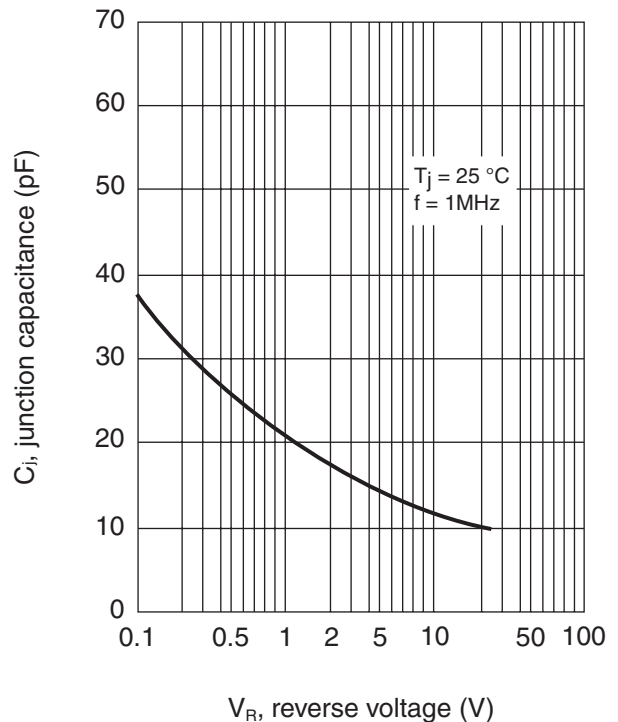
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



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

Date	Revision	Description of Changes
15-Sep-2009	0	Original Data Sheet
17-Jun-2016	1	Format update

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