




5.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

 <p>DO-201AD (DO-27)</p>	Voltage 50V to 1000V	Current 5 A at 55 °C	
	HYPERECTIFIER®		
	FEATURES <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
	MECHANICAL DATA <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. 		
TYPICAL APPLICATIONS Used in high frequency rectifier of switching mode power supplies, inverters, freewheeling diodes, dc-to-dc converters, and other power switching application.			

Maximun Ratings and Electrical Characteristics at 25 °C

Marking Code		EGP 50A	EGP 50B	EGP 50D	EGP 50F	EGP 50G	EGP 50J	EGP 50K	EGP 50M	
V _{RRM}	Peak recurrent reverse voltage (V)	50	100	200	300	400	600	800	1000	
V _{RMS}	Maximum RMS voltage (V)	35	70	140	210	280	420	560	700	
V _{DC}	Maximum DC blocking voltage (V)	50	100	200	300	400	600	800	1000	
I _{F(AV)}	Forward current at Tamb = 55 °C	5 A								
I _{FRM}	Recurrent peak forward current	50 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}	100 pF					65 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

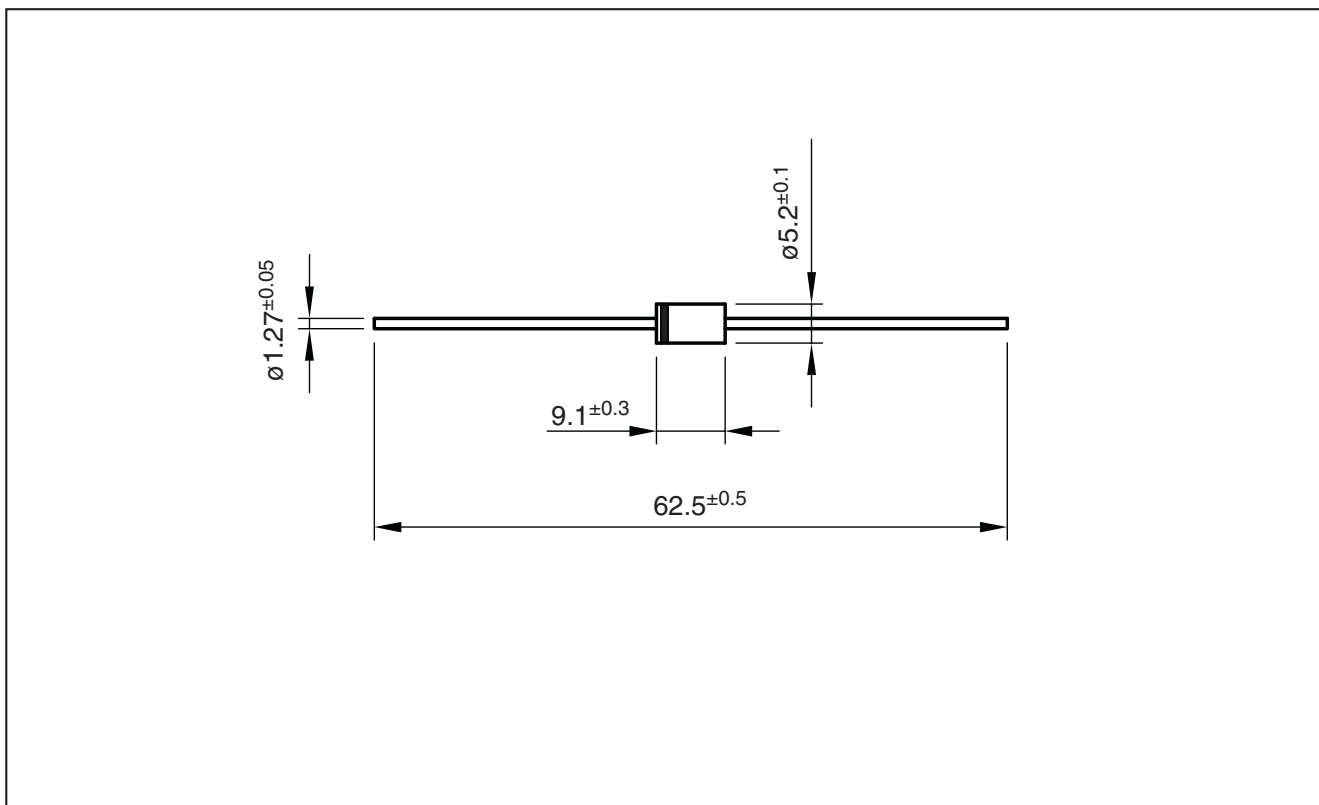
V _F	Max. forward voltage drop at I _F = 5 A	1.0 V	1.25 V	1.3 V	1.7 V
I _R	Max. reverse current at V _{RRM}	5 µA			
	at 25 °C				
	at 150 °C	50 µA			
R _{thj-a}	Max. thermal resistance (l = 10 mm.)	20 °C/W			

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
EGP50G AMP	AMP	AMMO BOX	1,500	1.100
EGP50G TR	TR	13" diameter tape and reel	1,500	1.100

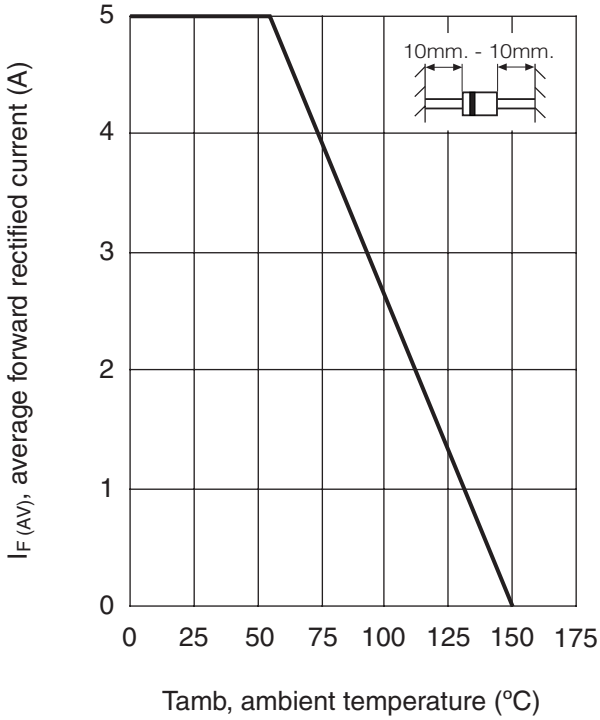
Package Outline Dimensions: (mm) DO-201AD (DO-27)



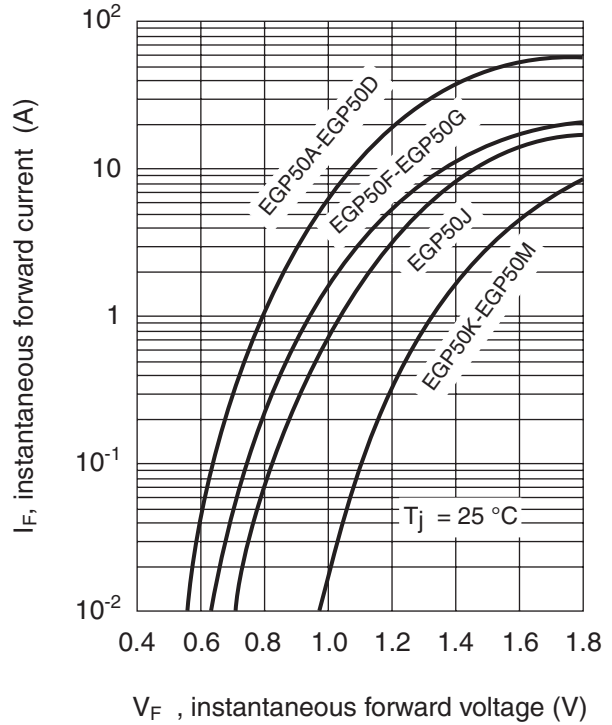
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

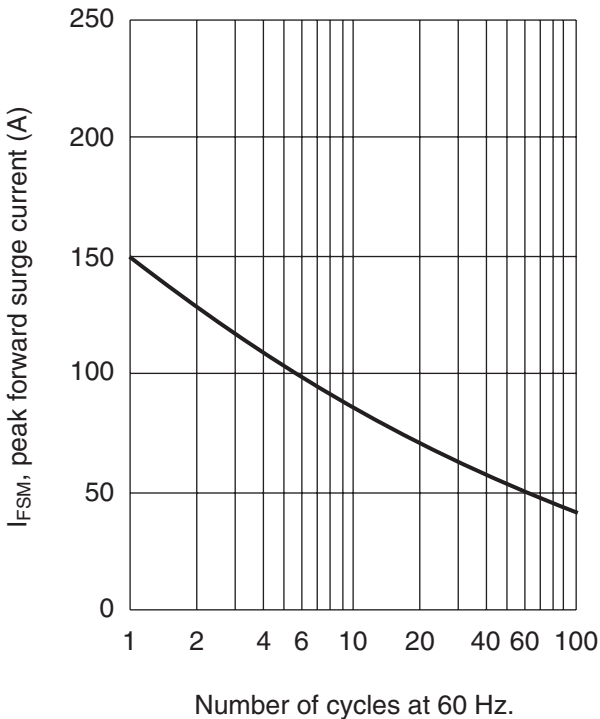
FORWARD CURRENT DERATING CURVE



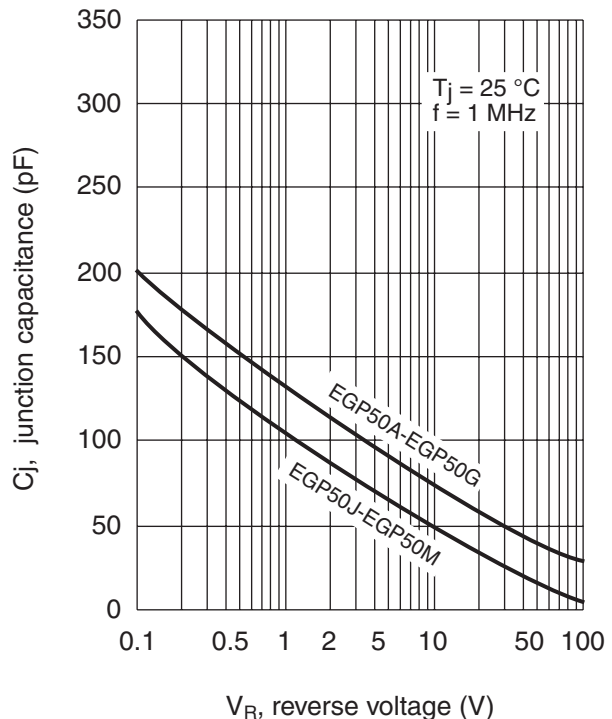
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



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

Date	Revision	Description of Changes
Jun-2009	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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