

1.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

 <p>DO-204AL (DO-41)</p>	Voltage 50V to 600V	Current 1.0 A at 55 °C	
			
	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-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. 		
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		EGP10A	EGP10B	EGP10D	EGP10F	EGP10G	EGP10J
V _{RRM}	Peak Recurrent Reverse Voltage (V)	50	100	200	300	400	600
V _{RMS}	Maximum RMS Voltage (V)	35	70	140	210	280	420
V _{DC}	Maximum DC Blocking Voltage (V)	50	100	200	300	400	600
I _{F(AV)}	Forward current at Tamb = 55 °C	1 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					
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

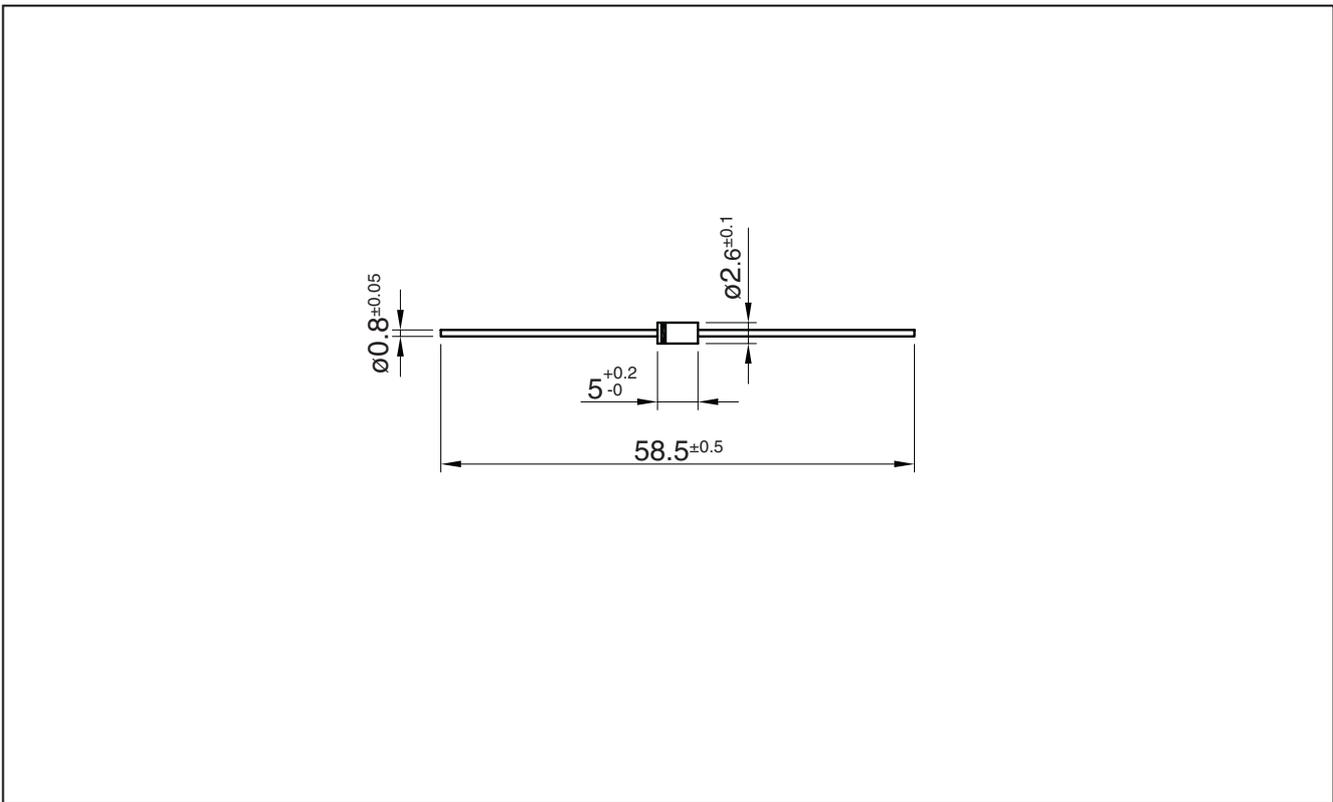
V _F	Maximum forward voltage drop at I _F = 1 A	0.95 V	1.25 V
I _R	Max. reverse current at V _{RRM} at 25 °C at 150 °C	5 µA 50 µA	
R _{th(j-a)}	Max. thermal resistance (l = 10mm)	60 °C/W	

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
EGP10D AMP	AMP	AMMO BOX	5,000	0.325
EGP10D TR	TR	14" diameter tape and reel	5,000	0.325

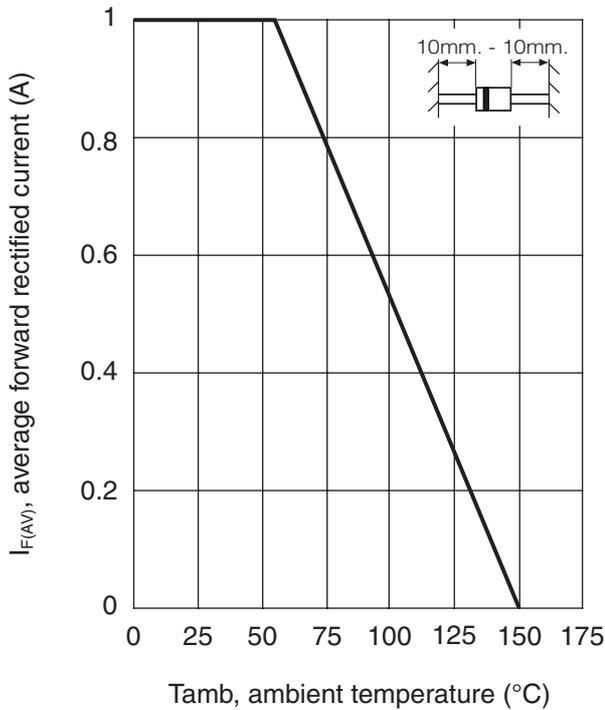
Package Outline Dimensions: (mm) DO-204AL (DO-41)



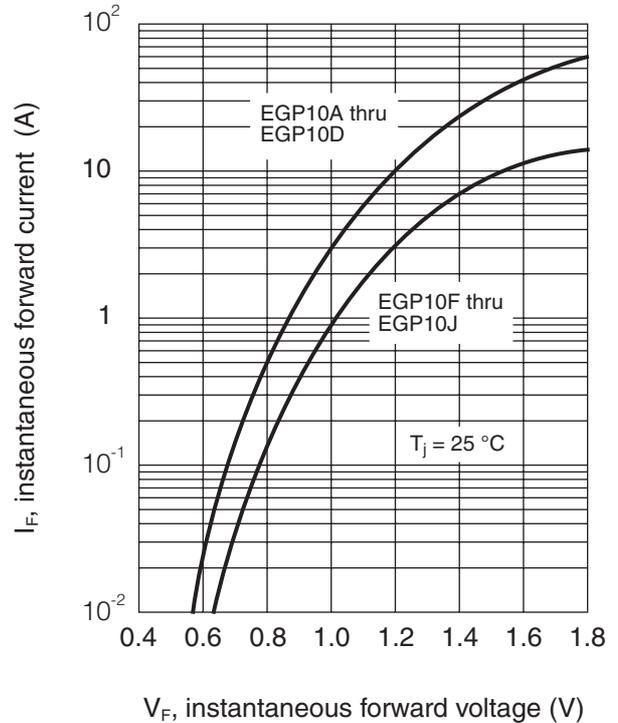
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

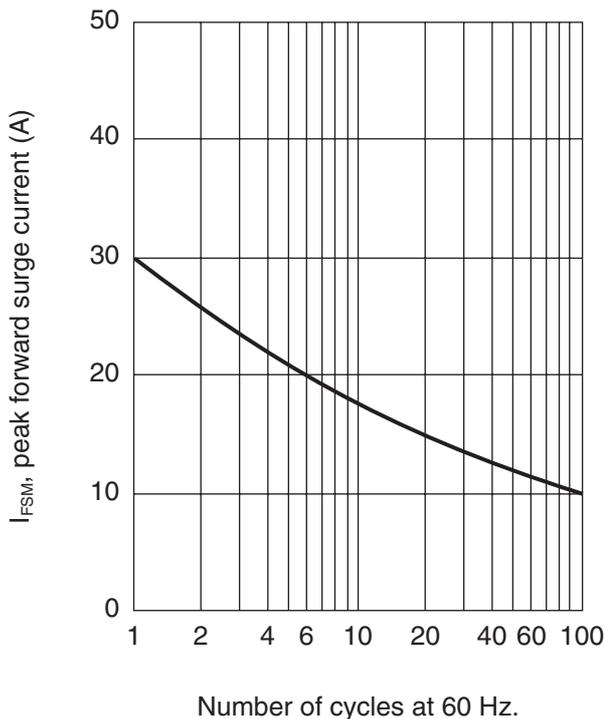
FORWARD CURRENT DERATING CURVE



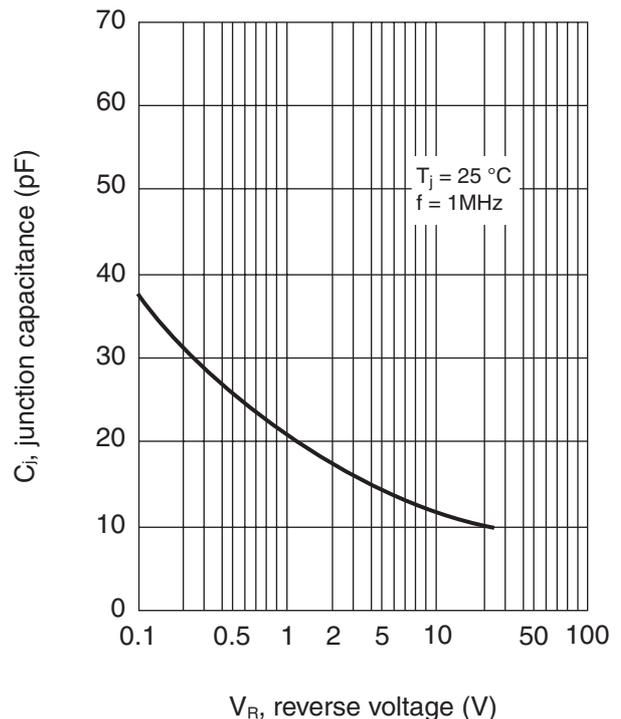
TYPICAL FORWARD CHARACTERISTIC



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
27-Jun-2016	1	Format update

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