

1.0 Amp. Glass Passivated Fast Recovery Rectifier

<p>DO-204AL (DO-41)</p> 	<p>Voltage 50V to 1000V</p>	<p>Current 1.0 A at 55 °C</p>	
			
	<p>FEATURES</p> <ul style="list-style-type: none"> • Low profile package • Low power losses, high efficiency • High surge current capability • Cavity-free glass-passivated junction • Low forward voltage drop • Solder dip 260°C, 10s • AEC-Q101 qualified • Fast switching for high efficiency • 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>For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.</p>			

Maximum Ratings and Electrical Characteristics at 25 °C

		RGP 10A	RGP 10B	RGP 10D	RGP 10G	RGP 10J	RGP 10K	RGP 10M	RGP 10MT
V _{RRM}	Peak Recurrent Reverse Voltage (V)	50	100	200	400	600	800	1000	1000
I _{F(AV)}	Forward Current at Tamb = 55 °C	1.0 A							
I _{FRM}	Recurrent Peak Forward Current	10 A							
I _{FSM}	8.3 ms. Peak Forward Surge Current (Jedec Method)	30 A							
t _{rr}	Maximum reverse recovery time from I _F = 0.5 A; I _R = 1 A; I _{RR} = 0.25 A	150 ns			250 ns	500 ns	300 ns		
T _j	Operating Temperature Range	-65 to +175°C							
T _{stg}	Storage Temperature Range	-65 to +175°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

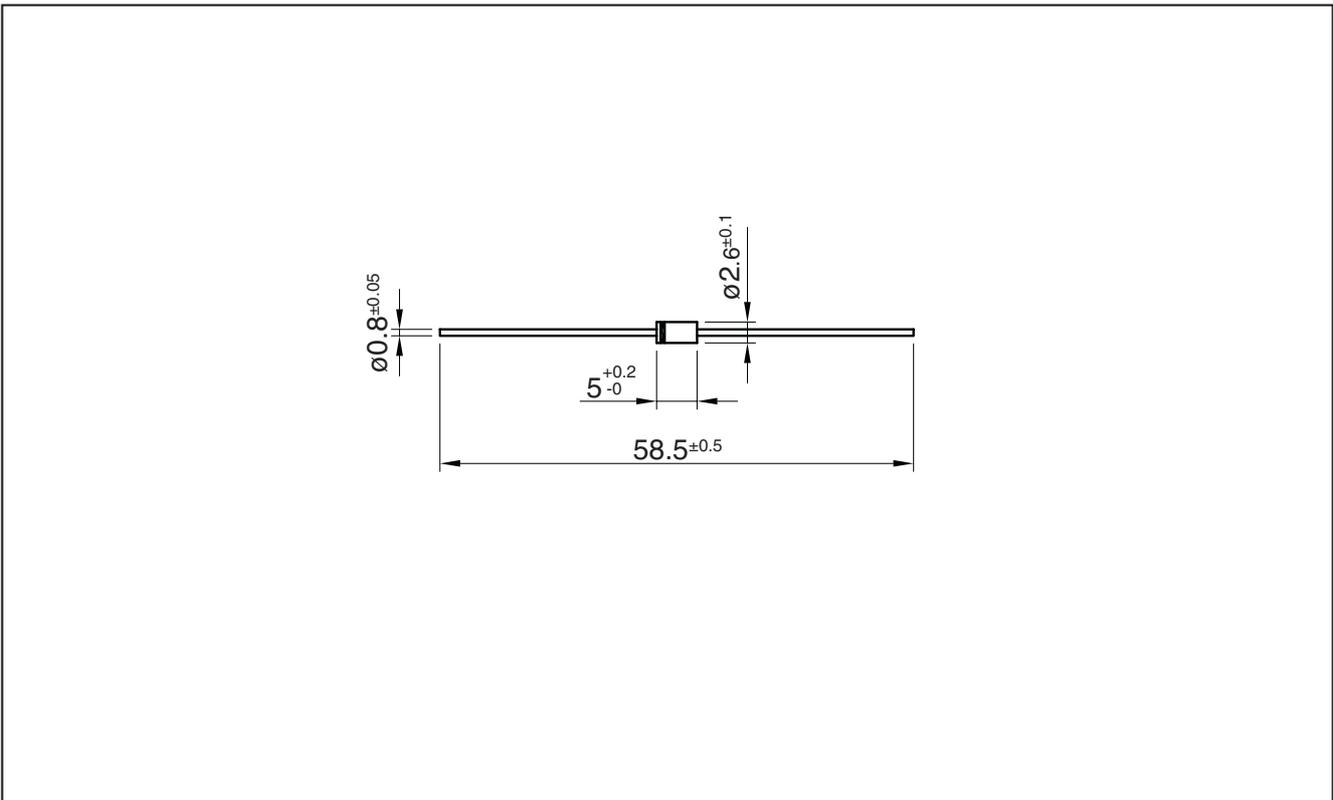
V _F	Maximum Forward Voltage Drop at I _F = 1 A	1.3 V
I _R	Maximum Reverse Current at V _{RRM}	5 µA
	at 25 °C	100 µA
	at 125 °C	
R _{th(j-a)}	Thermal Resistance (l = 10mm.)	Max. 60 °C/W
		Typ. 45 °C/W

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
RG10G AMP	AMP	AMMO BOX	5,000	0.325
RG10G TR	TR	14" diameter tape and reel	5,000	0.325

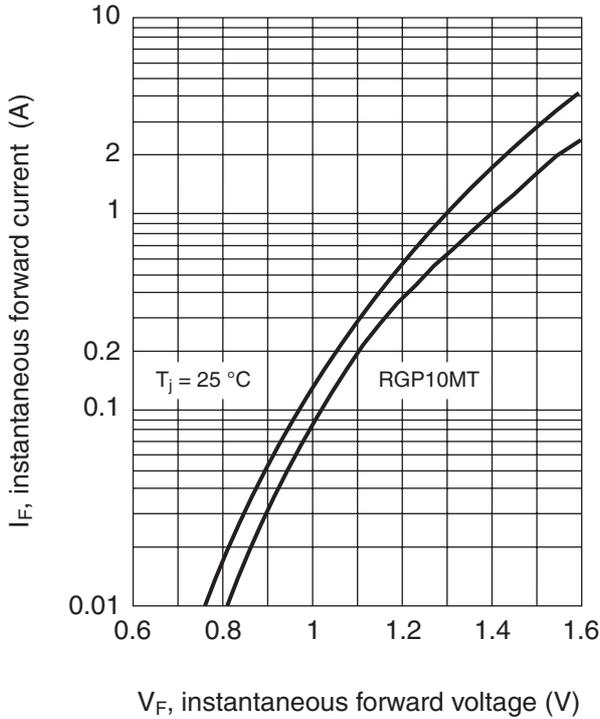
Package Outline Dimensions: (mm) DO-204AL (DO-41)



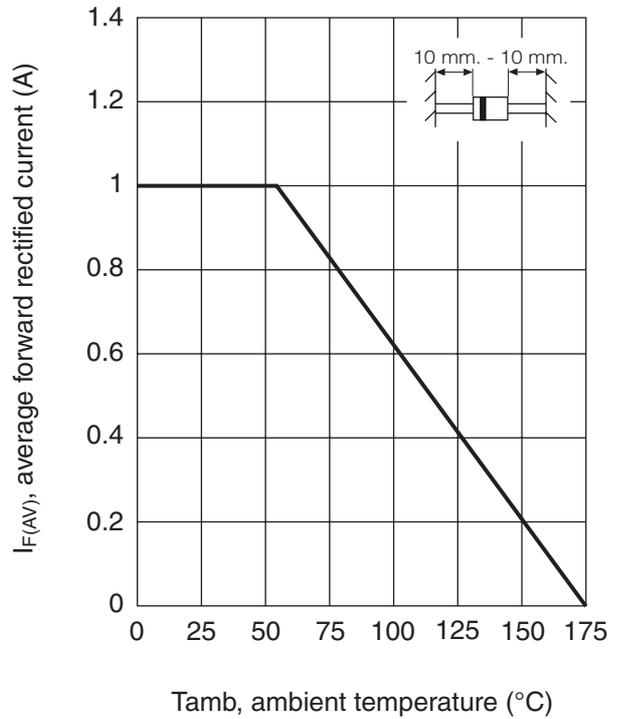
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

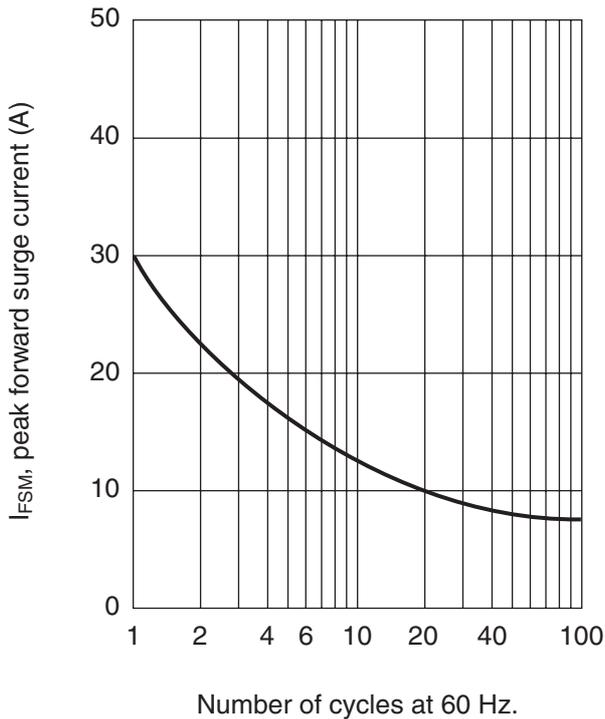
TYPICAL FORWARD CHARACTERISTIC



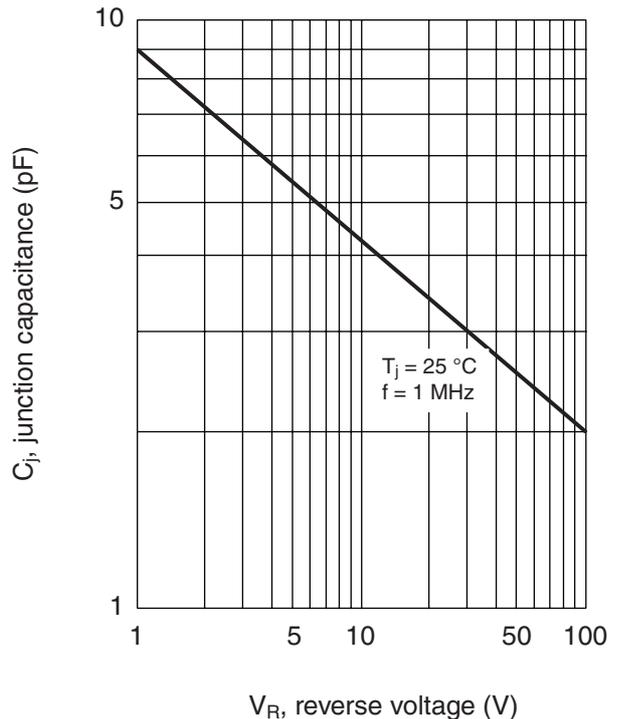
FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



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

Date	Revision	Description of Changes
12-Sep-2009	0	Original Data Sheet
05-Dec-2016	1	Format update

Disclaimer

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