

# **RGP15A ...... RGP15MT**

# 1.5 Amp. Glass Passivated Fast Recovery Rectifier

## DO-204AC (DO-15)



Voltage 50V to 1000V Current 1.5 A at 55 °C

HYPERECTIFIER

## ER

#### **FEATURES**

- 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

#### **MECHANICAL DATA**

- Case: DO-204AC (DO-15). 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**

For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

# Maximun Ratings and Electrical Characteristics at 25 °C

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		RGP 15A	RGP 15B	RGP 15D	RGP 15G	RGP 15J	RGP 15K	RGP 15KT		
V <sub>RRM</sub>	Peak Recurrent Reverse Voltage (V)	50	100	200	400	600	800	800	1000	1000
I <sub>F(AV)</sub>	Forward Current at Tamb = 55 °C					1.5 A				
I <sub>FRM</sub>	Recurrent Peak Forward Current					10 A				
I <sub>FSM</sub>	8.3 ms. Peak Forward Surge Current (Jedec Method)					50 A				
t <sub>rr</sub>	Maximum reverse recovery time from $I_F = 0.5 \text{ A}$ ; $I_R = 1 \text{ A}$ ; $I_{RR} = 0.25 \text{ A}$		150	) ns		250 ns	500 ns	300 ns	500 ns	300 ns
Tj	Operating Temperature Range	-65 to +175 °C								
T <sub>stg</sub>	Storage Temperature Range		-65 to +175 °C							
E <sub>RSM</sub>	Maximum non Repetitive Peak Reverse Avalanche energy. I <sub>R</sub> = 1 A; T <sub>j</sub> = 25 °C	20 mJ								

### Electrical Characteristics at Tamb = 25 °C

V <sub>F</sub>	Maximum Forward Voltage Drop at	$I_F = 1.5 A$	1.3 V
I <sub>R</sub>	Maximum Reverse Current at V <sub>RRM</sub> at 25 °C at 150 °C		5 μΑ
			200 μΑ
R <sub>th(j-a)</sub>	Thermal Resistance (I = 10mm.)	Max.	50 °C/W
		Тур.	30 °C/W

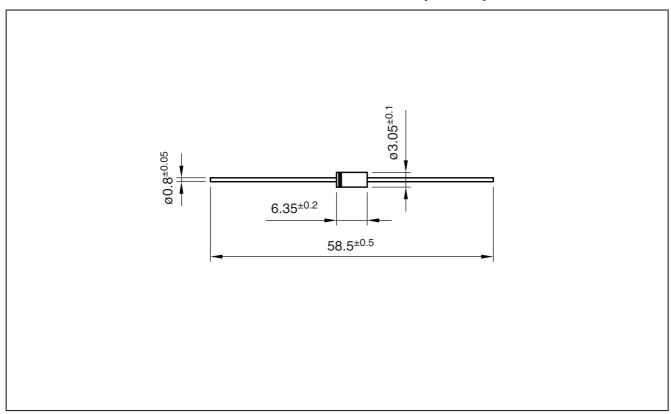


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# **Ordering information**

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)	
RGP15D AMP AMMO BOX		4,000	0.378		
RGP15D TR	TR	14" diameter tape and reel	4,000	0.378	

# Package Outline Dimensions: (mm) DO-204AC (DO-15)

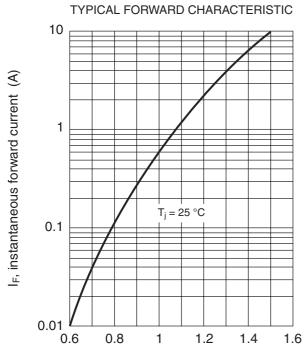




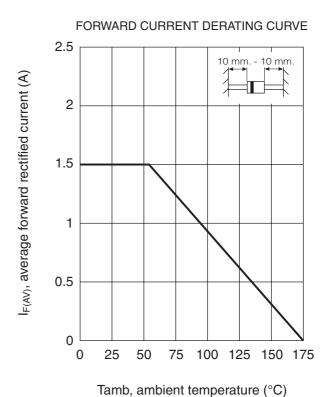


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# Ratings and Characteristics (Ta 25 °C unless otherwise noted)

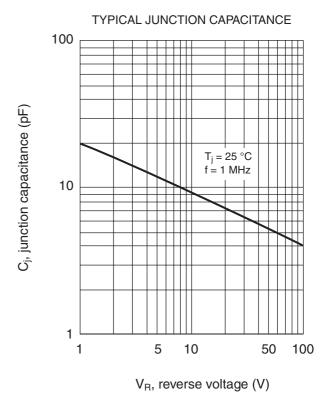


V<sub>F</sub>, instantaneous forward voltage (V)



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT 50 FSM, peak forward surge current (A) 40 30 20 10 0 2 4 6 10 20 40 100 1

Number of cycles at 60 Hz.



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## 1.5 Amp. Glass Passivated Fast Recovery Rectifier

### **Revision History**

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

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