

# DC COMPONENTS CO., LTD.

# RECTIFIER SPECIALISTS

GBPC 35005(W) THRU GBPC 3510(W)

# TECHNICAL SPECIFICATIONS OF GLASS PASSVATED BRIDGE RECTIFIER

## VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 35 Amperes

#### **FEATURES**

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* Diffused junction
- \* Glass passivated junction

## **MECHANICAL DATA**

\* Case: Molded plastic

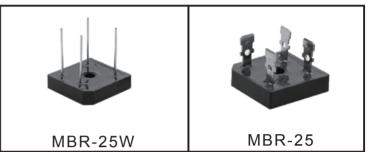
\* Epoxy: UL 94-V0 rated flame retardant

\* Lead: MIL-STD-202E, Method 208 guaranteed

\* Polarity: Symbols molded or marked on body

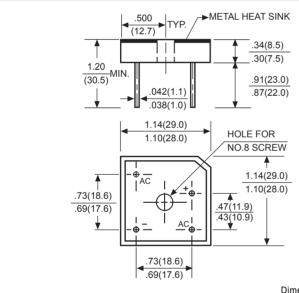
\* Mounting position: Any

\* Weight: 25 grams

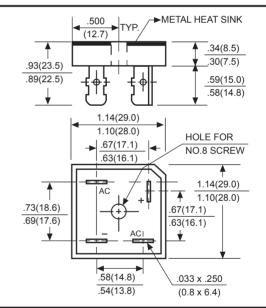


#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.



Dimensions in inches and (millimeters)

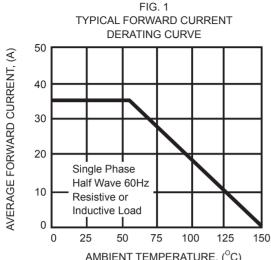


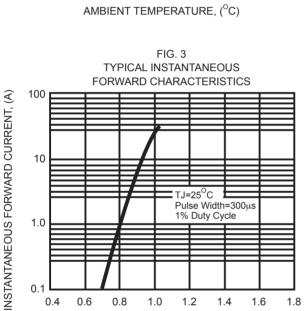
	SYMBOL	GBPC 35005(W)	GBPC 3501(W)	GBPC 3502(W)	GBPC 3504(W)	GBPC 3506(W)	GBPC 3508(W)	GBPC 3510(W)	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 55°C	lo	35						Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	400						Amps	
Maximum Instantaneous Forward Voltage at 17.5A DC	VF	1.1						Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage $@TA = 25^{\circ}C$ $@TA = 125^{\circ}C$	<b>—</b> ID	10 100							μ <b>A</b> mps
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	l <sup>2</sup> t	664						A <sup>2</sup> s	
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150						°C	

Note: Suffix "<u>W</u>" for wire lead type (e.g.:GBPC35005<u>W</u>,GBPC3501<u>W</u>...etc)

REV-4,OCT,2020 1 www.dccomponents.com

# RATING AND CHARACTERISTIC CURVES (GBPC35005(W) THRU GBPC3510(W))





1.2

INSTANTANEOUS FORWARD VOLTAGE, (V)

1.0

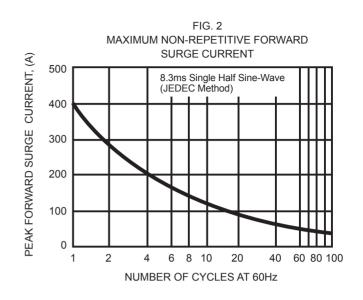
1.8

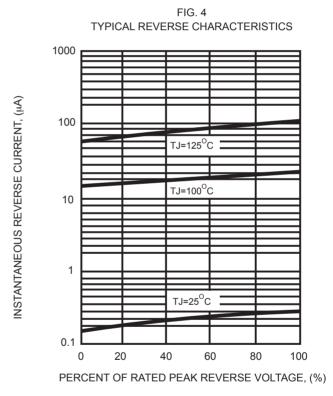
0.1

0.4

0.6

0.8





REV-4.OCT.2020 www.dccomponents.com

# **Disclaimer**

Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold *DC COMPONENTS* are harmless against all damages.

**DC COMPONENTS** disclaims any and all liability arising out of the application or use of any product, including consequential or incidental damages. Statement regarding the suitability of products for certain types of applications are based on **DC COMPONENTS**'s knowledge of typical requirements that are often placed on **DC COMPONENTS** products in generic applications. Such statements are not binding statements about the suitability of products for aparticular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

*DC COMPONENTS* reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein, and disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Parameters provided in datasheets and specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify *DC COMPONENTS*'s terms and conditions of purchase, including but not limited to the warranty expressed therein.

Unless otherwise in writing, *DC COMPONENTS* products are intended for use as general electronic components in standard applications (eg: Consumer electronic, Computer equipment, Office equipment, etc.), and not recommended for use in a high specific application where a failure or malfunction of the device could result in human injury or death (eg: Aerospace equipment, Submarine cables, Combustion equipment, Safety devices, Life support systems, etc.)

Customers using or selling *DC COMPONENTS* products not expressly indicated for use in such applications do so at their own risk. If customer intended to use *DC COMPONENTS* standard quality grade devices for applications not envisioned by *DC COMPONENTS*, please contact our sales representatives in advance.



REV-4.OCT.2020 3 www.dccomponents.com