



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**GBPC6005
THRU
GBPC610**

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 6.0 Amperes

FEATURES

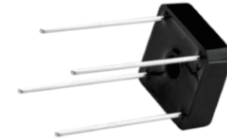
- * Ideal for printed circuit board
- * High surge current capability
- * Low forward voltage drop
- * Glass passivated junction

MECHANICAL DATA

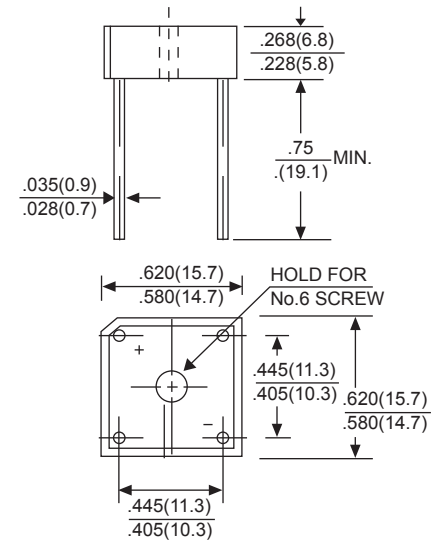
- * Case: Molded plastic
- * Epoxy: UL 94-V0 rate flame retardant
- * Terminals: Solder plated solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 3.36 grams

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%.



BR-6



Dimensions in inches and (millimeters)

	SYMBOL	GBPC 6005	GBPC 601	GBPC 602	GBPC 604	GBPC 606	GBPC 608	GBPC 610	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 = 50°C	IO	6.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150							Amps	
Maximum Instantaneous Forward Voltage at 3.0 A DC	VF	1.1							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TJ = 25°C	IR	10							μAmps
	@TJ = 125°C		1000							
Typical Junction Capatiance (Note1)	CJ	30							pF	
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150							°C	

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (GBPC6005 THRU GBPC610)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

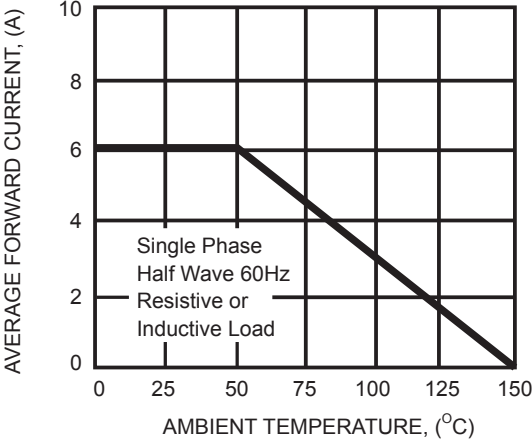


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

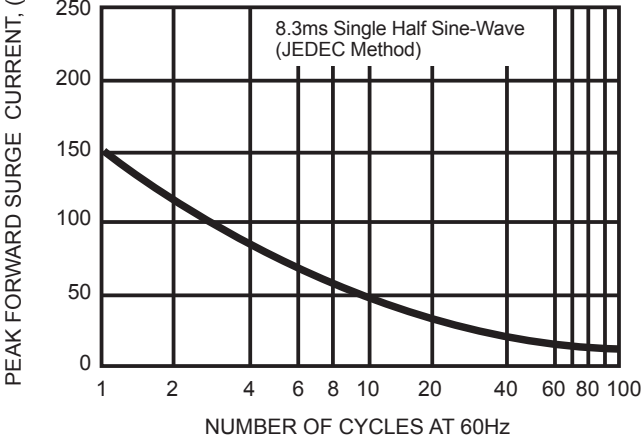


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

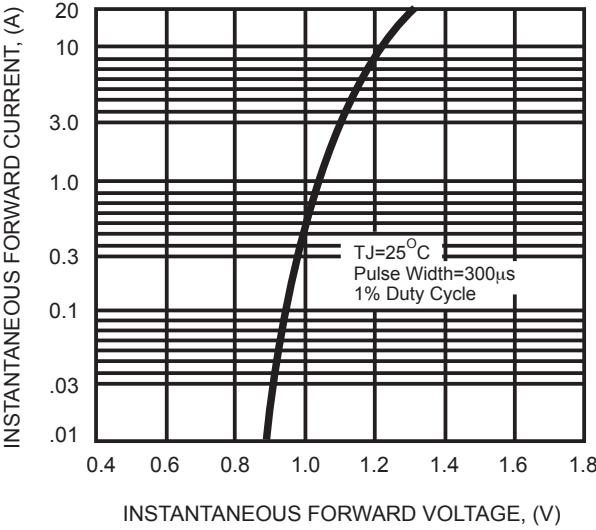
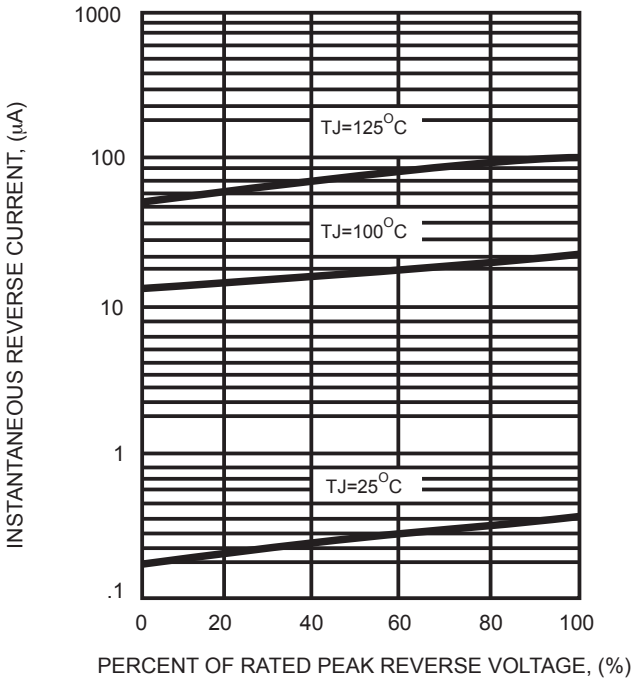


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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