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

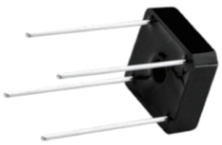
* Ideal for printed circuit boardd
* High surge current capability
* Low forward voltage drop
* Glass passivated junction

MECHANICAL DATA

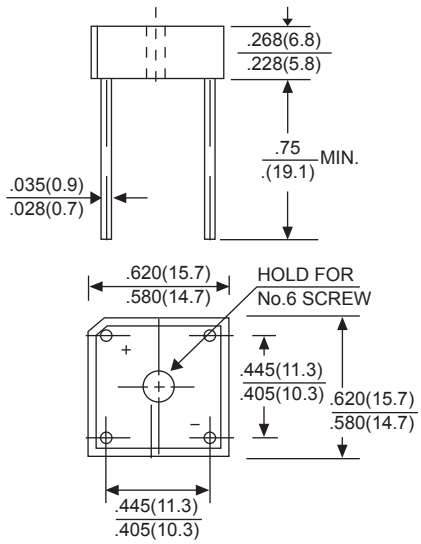
* Case: Molded plastic
* Epoxy: UL 94-V0 rate flame retardant
* Terminals: Solder plated solderable per MIL-STD-750, Method 2026
* Polarity: As marked
* Mounting position: Any
* Weight: 3.36 grams

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		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_A = 50°C		I_O	6.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	150							Amps
Maximum Instantaneous Forward Voltage at 3.0 A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TJ = 25°C	I_R	10							μAmps
	@TJ = 125°C		1000							
Typical Junction Capatiance (Note1)		C_J	30							pF
Operating and Storage Temperature Range		T_J,T_{STG}	-55 to +150							°C

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

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RATING AND CHARACTERISTIC CURVES (GBPC6005 THRU GBPC610)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

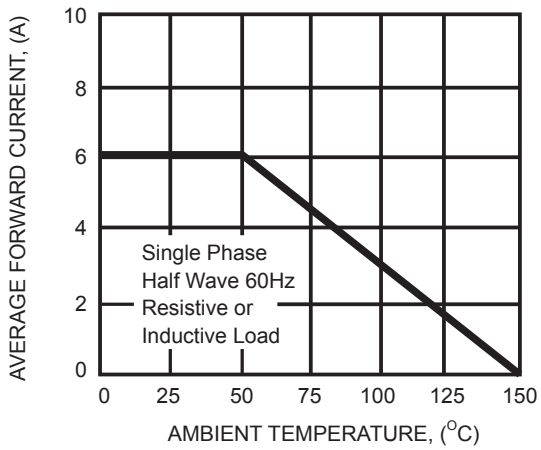


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

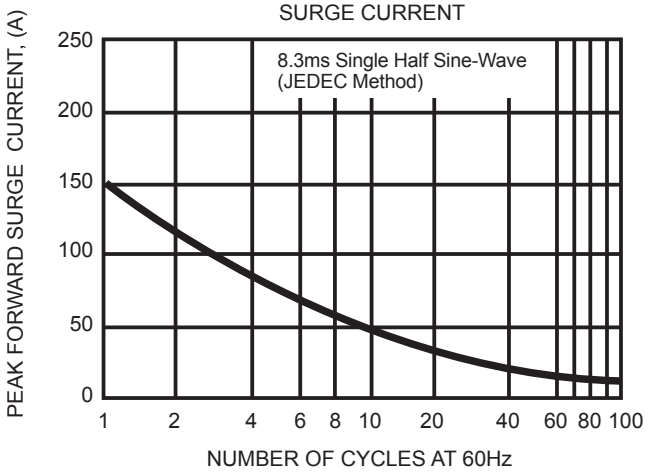


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

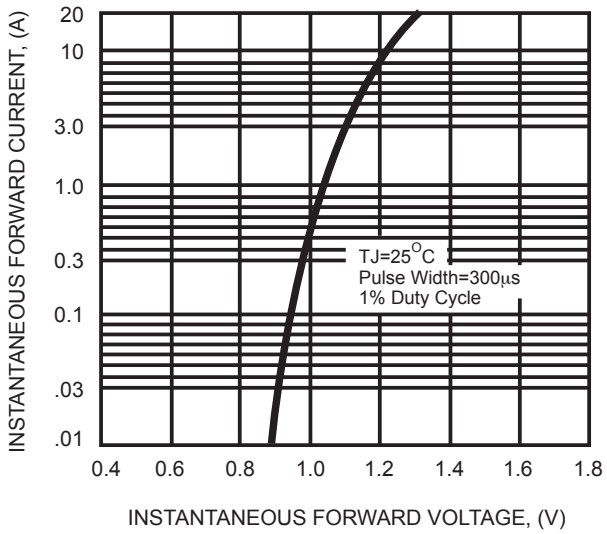
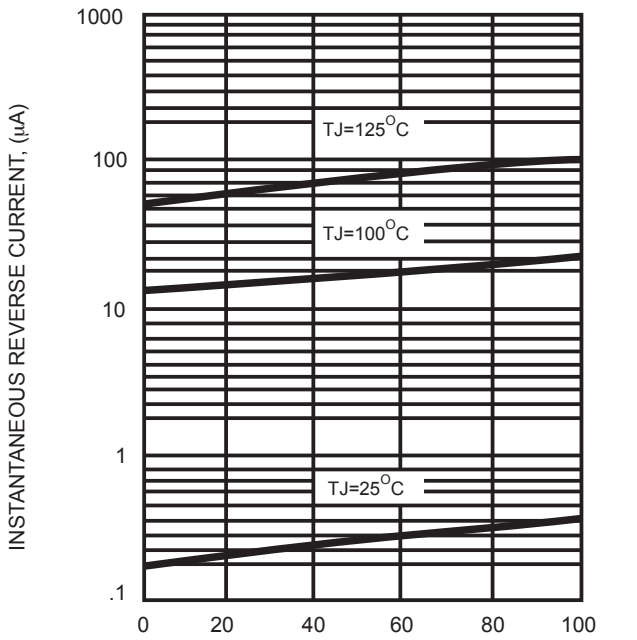


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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