



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**GBPC50005
THRU
GBPC5010**

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts **CURRENT - 50 Amperes**

FEATURES

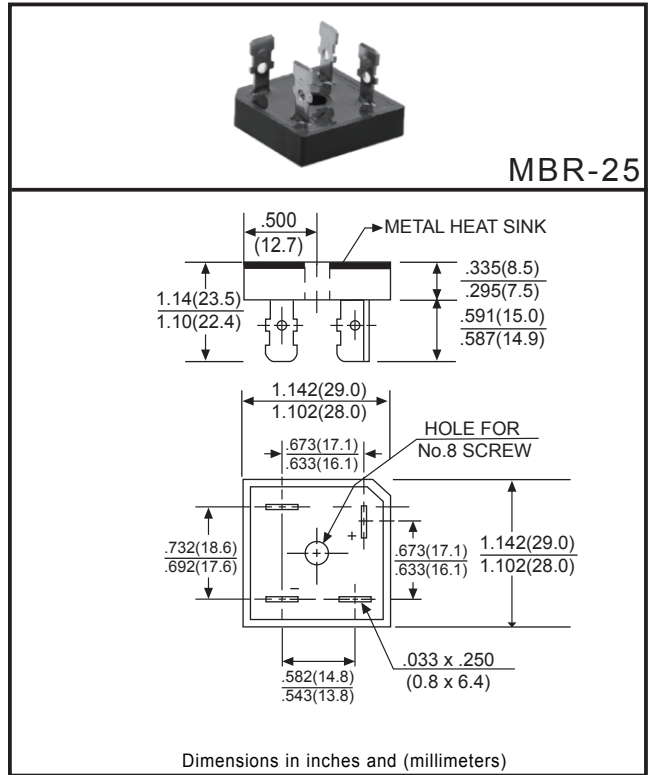
- * Ideal for printed circuit board
- * High surge current capability
- * Low forward voltage drop
- * Glass passivated junction

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: 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%.



	SYMBOL	GBPC 50005	GBPC 5001	GBPC 5002	GBPC 5004	GBPC 5006	GBPC 5008	GBPC 5010	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 = 55°C	I _O	50							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	450							Amps
Maximum Instantaneous Forward Voltage at 25 A DC	V _F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@T _J = 25°C							μAmps
		@T _J = 125°C							
I ² t Rating for Fusing (t<8.3ms)	I ² t	664							A ² s
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to +150							°C

RATING AND CHARACTERISTIC CURVES (GBPC50005 THRU GBPC5010)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

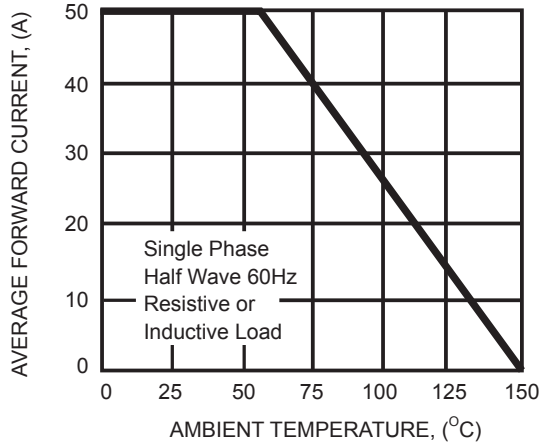


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

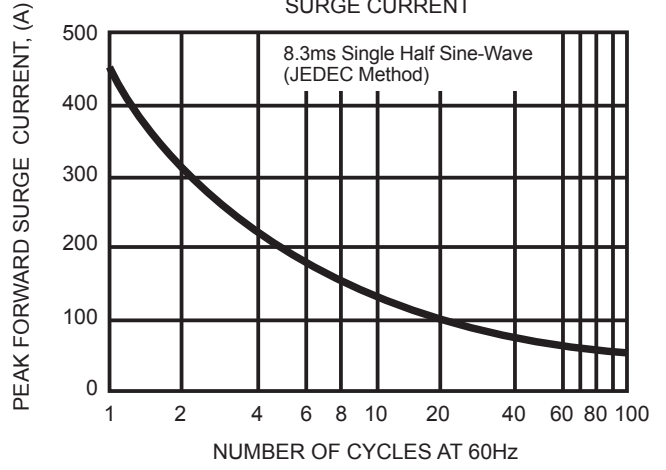


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

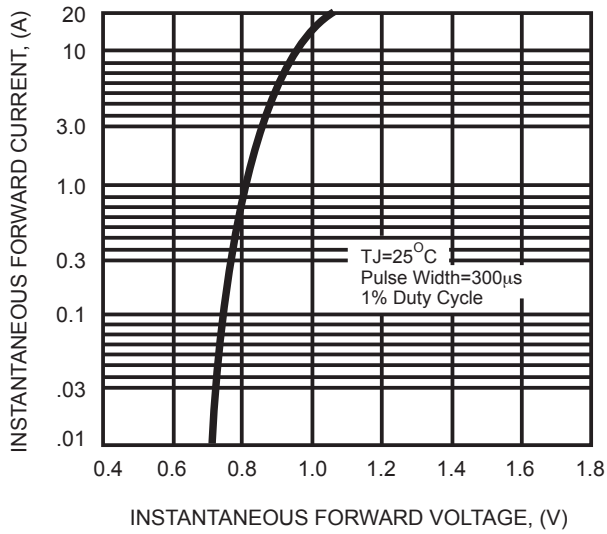
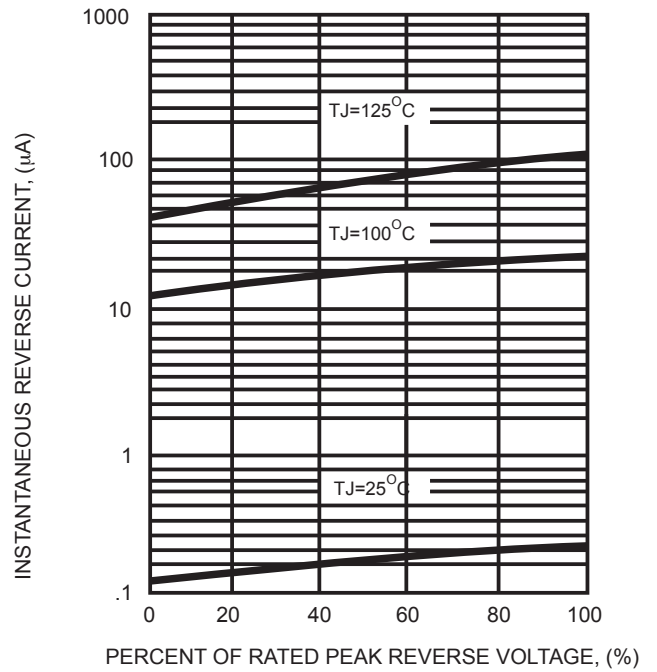


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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