DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

GBPC25005 THRU GBPC2510

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 25 Amperes*

FEATURES

* Plastic case with heatsink for Maximum Heat Dissipation
* Diffused Junction
* High current capability
* Surge overload ratings - 340 Amperes
* Low forward voltage drop
* High Reliability
* Glass passivated junction

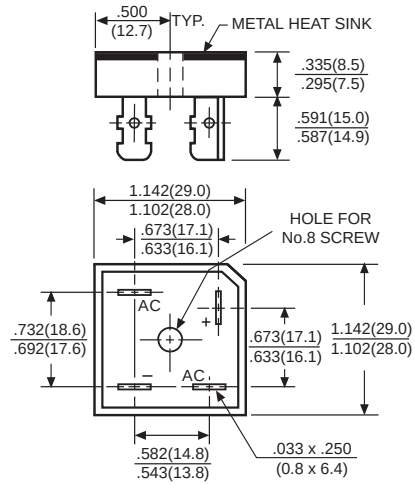
MECHANICAL DATA

* Case: Molded plastic with heatsink
* Epoxy: UL 94V-0 rate flame retardant
* Terminals: Plated .25"(6.35mm) Faston lugs, Solderable per MIL-STD-202E, Method 208 guaranteed
* Polarity: As marked
* Mounting position: Any
* Weight: 25 grams approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

MBR-25



Dimensions in inches and (millimeters)

		SYMBOL	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at Tc =55°C		I_O	25							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	350							Amps
Maximum Forward Voltage Drop per element at 12.5A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated	@T_A = 25°C	I_R	10							μAmps
DC Blocking Voltage per element	@T_A = 100°C		500							
Operating and Storage Temperature Range		T_J,T_{STG}	-55 to +150							°C

RATING AND CHARACTERISTIC CURVES (GBPC25005 THRU GBPC2510)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

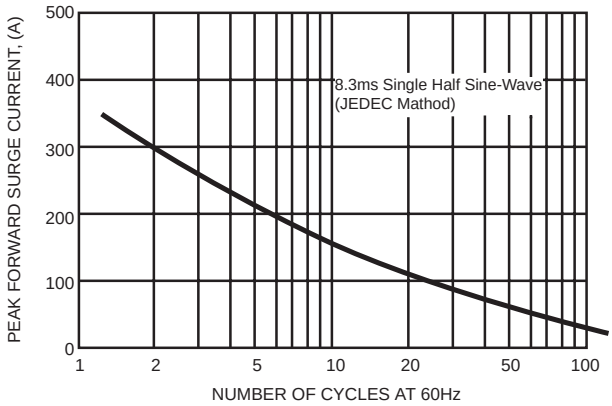


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

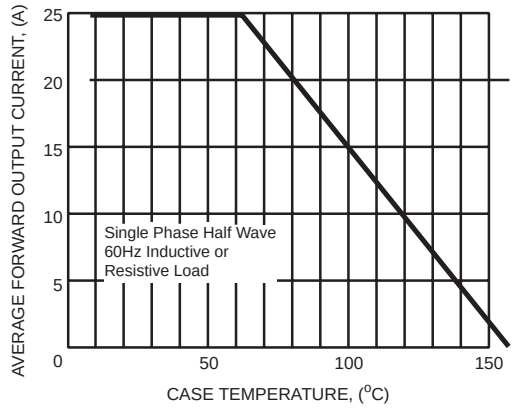


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

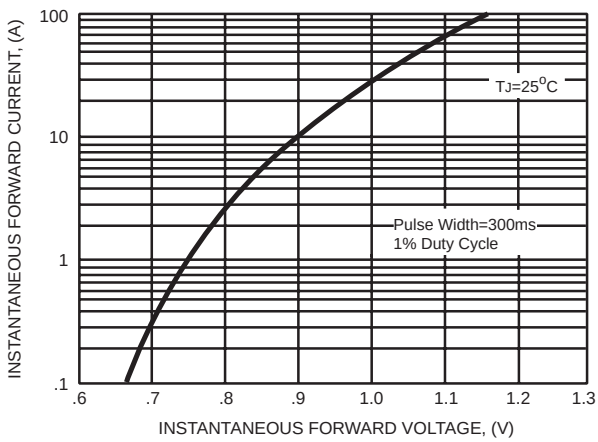
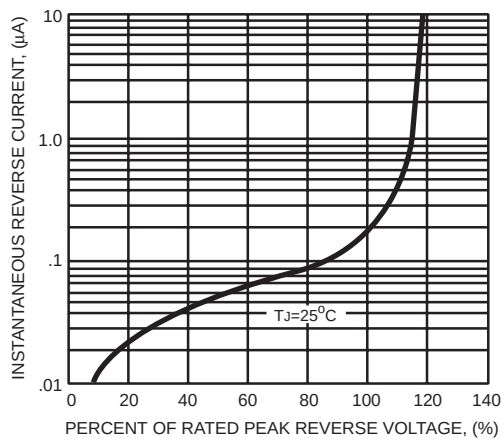


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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