



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**GBPC25005W
THRU
GBPC2510W**

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 - 350 Amperes
- * Low forward voltage drop
- * High Reliability
- * Glass passivated junction

MECHANICAL DATA

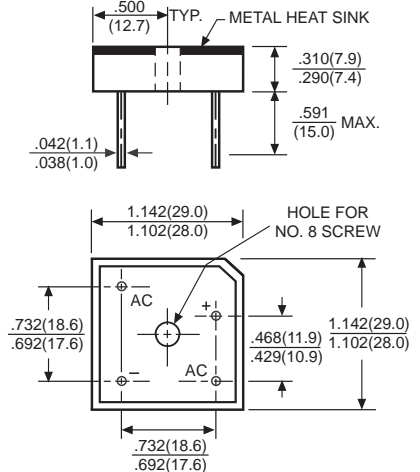
- * Case: Molded plastic with heatsink
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 25 grams approx.

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-25W



Dimensions in inches and (millimeters)

	SYMBOL	GBPC 25005W	GBPC 25010W	GBPC 25020W	GBPC 25040W	GBPC 25060W	GBPC 25080W	GBPC 25100W	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 T _c = 50°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	I _R	@ T _A = 25°C							10	μAmps
DC Blocking Voltage per element		@ T _A = 100°C								
I ² t Rating for Fusing (t<8.3ms)	I ² t	374							A ² Sec	
Typical Junction Capacitance (Note1)	C _J	300							pF	
Typical Thermal Resistance (Note 2)	R _{θJC}	2.5							°C/W	
Operating and Storage Temperature Range	T _{J,TSTG}	-55 to +150							°C	

NOTES : 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts
2.Thermal Resistance from Junction to Case per leg.

RATING AND CHARACTERISTIC CURVES (GBPC25005W THRU GBPC2510W)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

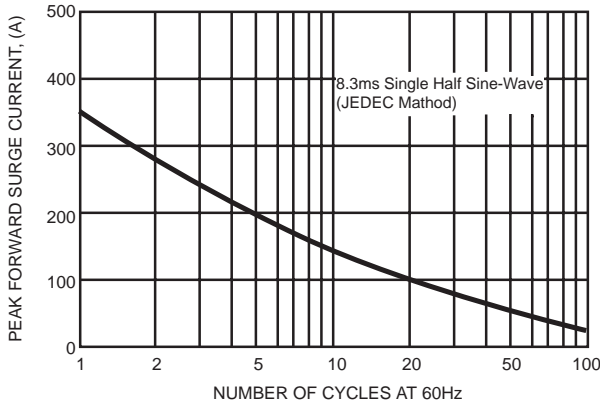


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

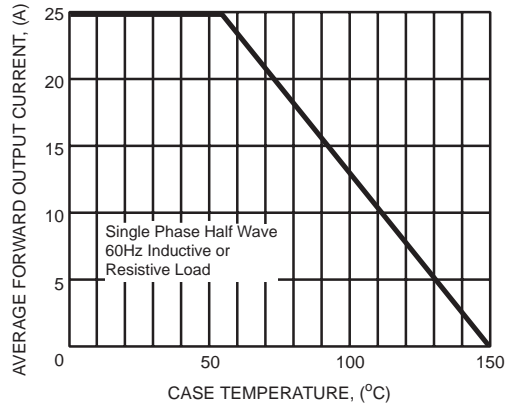


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

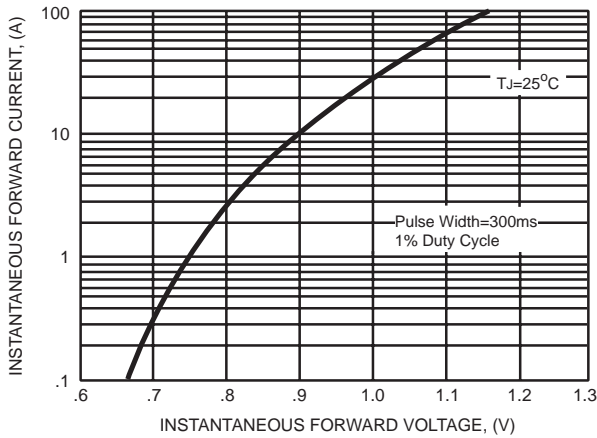
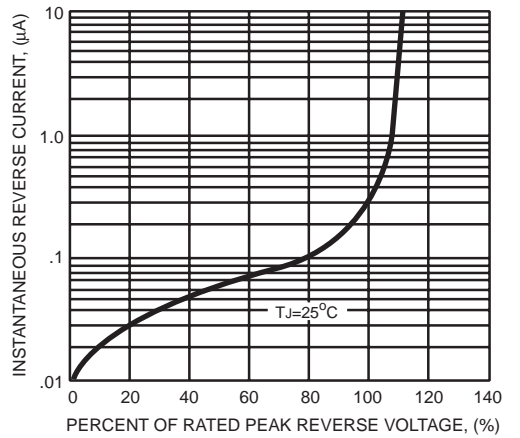


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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