

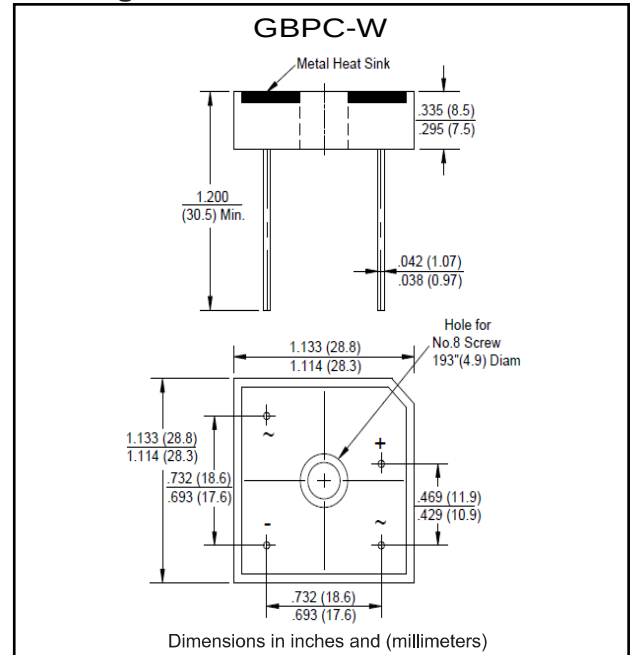
FEATURES

- Rating to 1000V PRV
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat dissipation

MECHANICAL DATA

- Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation
- Polarity : As marked on Body
- Mounting : Hole for # 10 screw

Package outline



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%

CHARACTERISTICS	SYMBOL	GBPC 35005W	GBPC 3501W	GBPC 3502W	GBPC 3504W	GBPC 3506W	GBPC 3508W	GBPC 3510W	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _C = T _a	I _(AV)	35.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	400							A
Maximum forward Voltage at 17.5A DC	V _F	1.0							V
Maximum DC Reverse Current @T _J = 25°C at Rated DC Blocking Voltage @T _J = 125°C	I _R	5.0 500							uA
I ² t Rating for fusing (t < 8.3ms), (Note 1)	I ² t	664							A ² S
Typical Thermal Resistance (Note 2)	R _{θJC}	5.0							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES : 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms

2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

Characteristics(Typical)

Fig. 1 - Forward Current Derating Curve

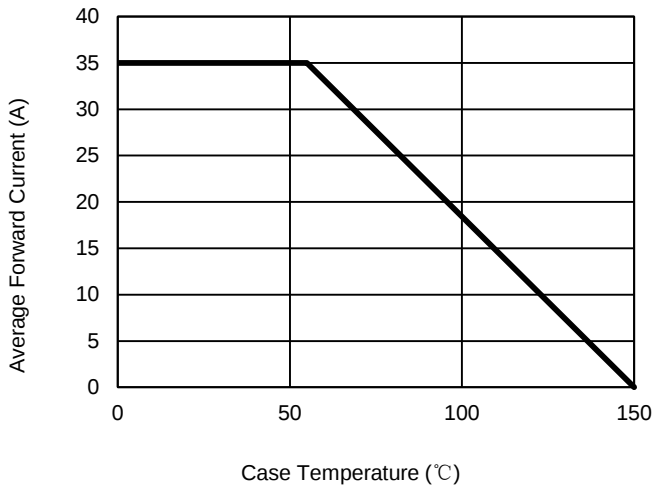


Fig. 2 - Maximum Non-Repetitive Surge Current

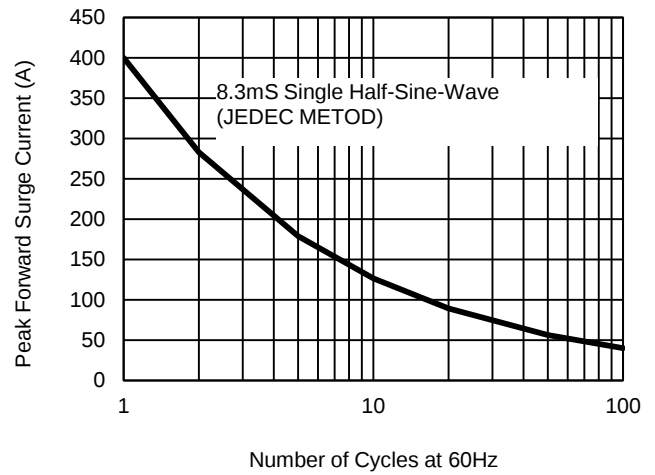


Fig. 3 - Typical Reverse Characteristics

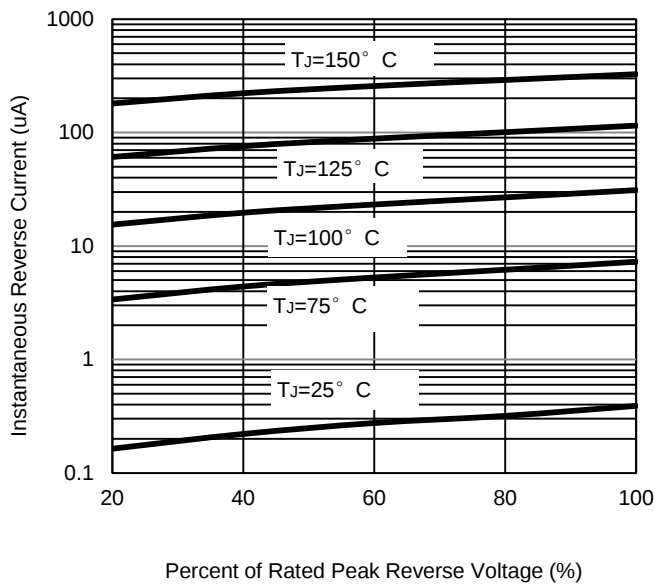
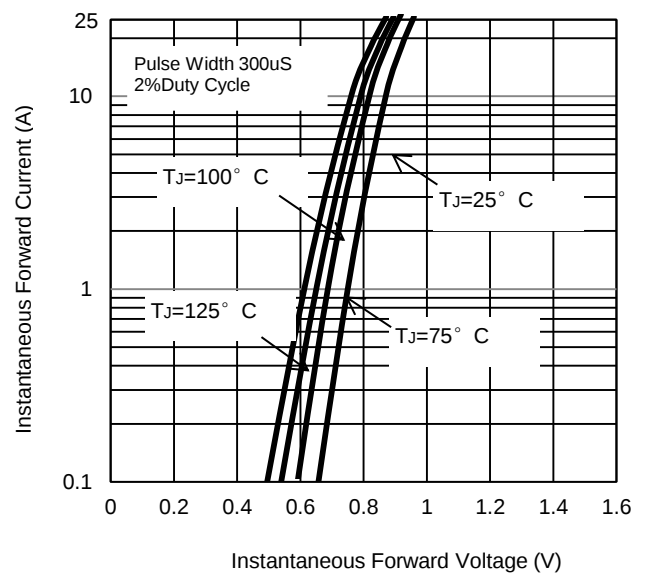
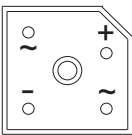
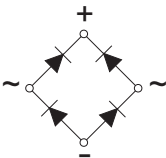


Fig. 4 - Typical Forward Characteristics



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
GBPC35005W	GBPC35005W
GBPC3501W	GBPC3501W
GBPC3502W	GBPC3502W
GBPC3504W	GBPC3504W
GBPC3506W	GBPC3506W
GBPC3508W	GBPC3508W
GBPC3510W	GBPC3510W