

**GBPC35005W-GBPC3510W**

**Single-Phase 35.0A Glass Passivated Bridge Rectifier**

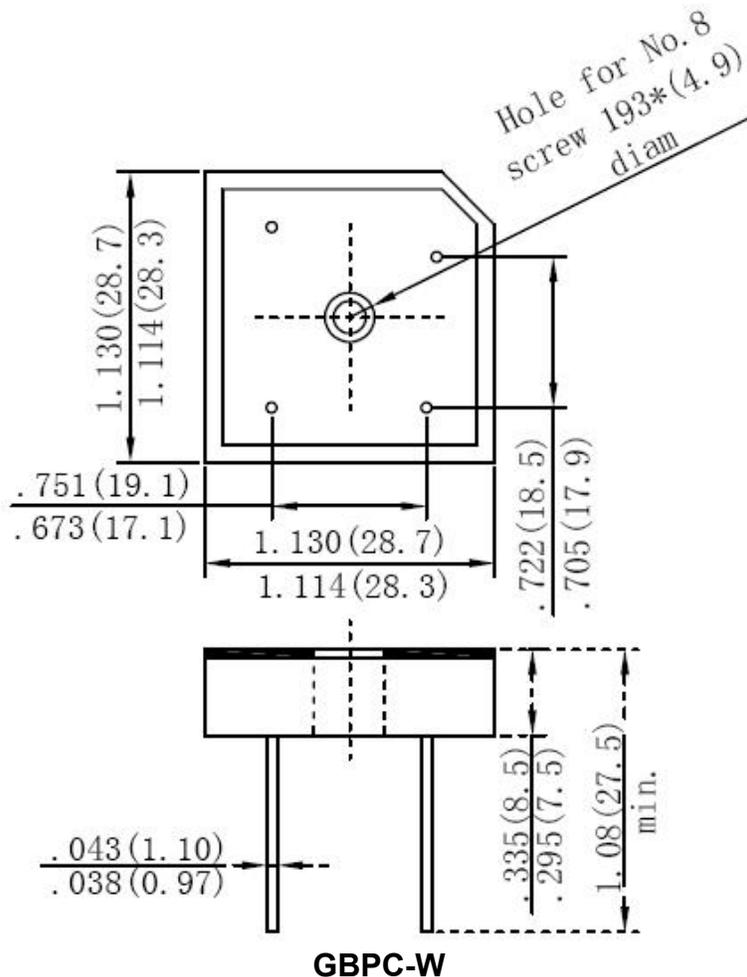
**Features:**

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

**Mechanical Data:**

- Case: GBPC-W, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version

**Mechanical Dimensions: In mm/Inches**



**Maximum Ratings and Electrical Characteristics** Rating at 25°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

**Maximum Ratings:**

Type Number	Symbol	GBPC 35005W	GBPC 3501W	GBPC 3502W	GBPC 3504W	GBPC 3506W	GBPC 3508W	GBPC 3510W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{DC}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average forward rectified output current (Note 1) @ $T_A = 55^\circ C$	$I_o$	35.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							A

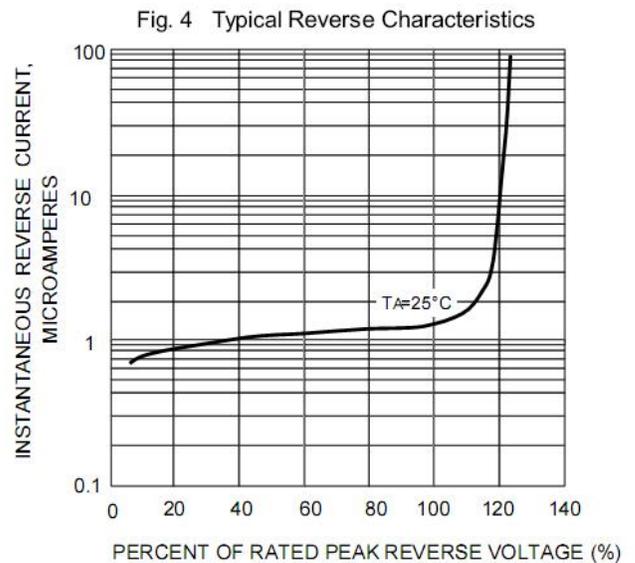
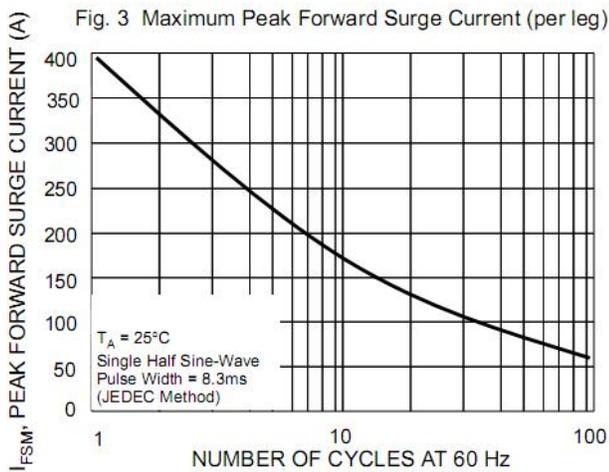
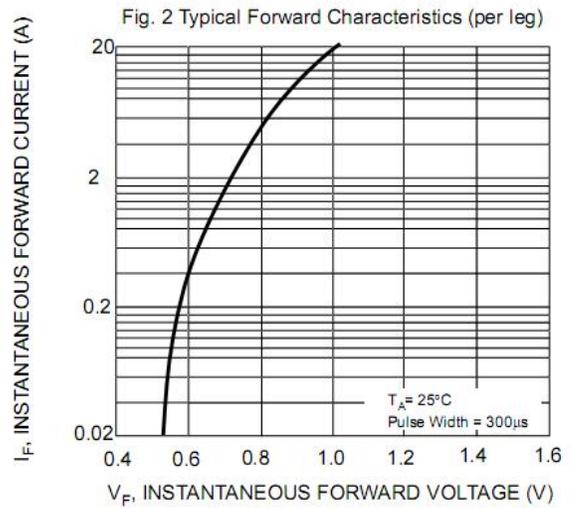
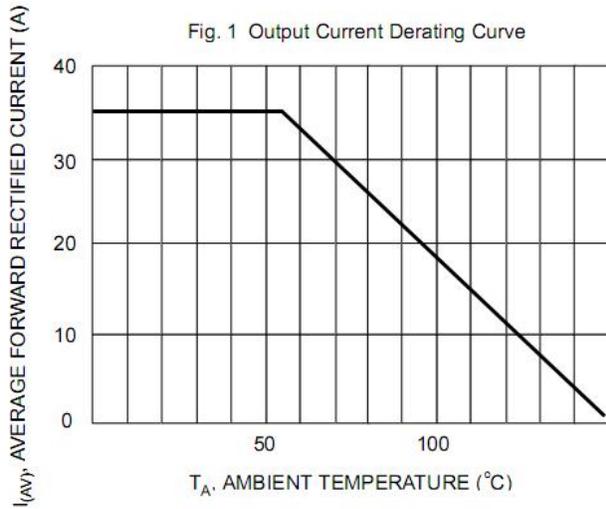
**Electrical Characteristics:**

Type Number	Symbol	GBPC 35005W	GBPC 3501W	GBPC 3502W	GBPC 3504W	GBPC 3506W	GBPC 3508W	GBPC 3510W	Unit
Forward Voltage (per element) @ $I_F = 17.5A$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 125^\circ C$	$I_R$	5.0 500							$\mu A$
Typical Junction Capacitance(per leg) (Note 2)	$C_J$	300							pF

**Thermal-Mechanical Specifications:**

Type Number	Symbol	GBPC 35005W	GBPC 3501W	GBPC 3502W	GBPC 3504W	GBPC 3506W	GBPC 3508W	GBPC 3510W	Unit
Typical Thermal Resistance (per leg)	$R_{\theta JL}$	2.2							$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ C$
Case Style		GBPC-W							

Note: 1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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