

# GBPC35005 THRU GBPC3510

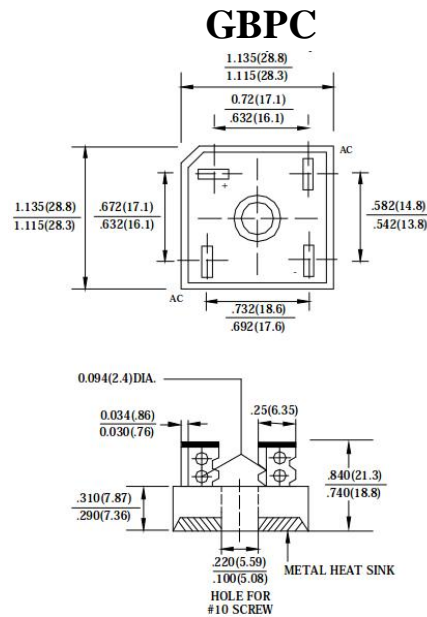
SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS  
 REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

## FEATURES

- ◆ Rating to 1000V PRV.
- ◆ High efficiency.
- ◆ Glass passivated chip junction.
- ◆ Electrically isolated metal case for maximum heat dissipation.
- ◆ The plastic material has UL flammability classification 94V-0.
- ◆ Electrically isolated base-2500 Volts

## Mechanical Data

- ◆ Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
- ◆ Polarity: As marked on Body.
- ◆ Mounting : Hole for # 10 screw.
- ◆ Weight : 0.55 ounces , 15.6 grams (terminal) .



Dimensions in inches and (millimeters)

## 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%

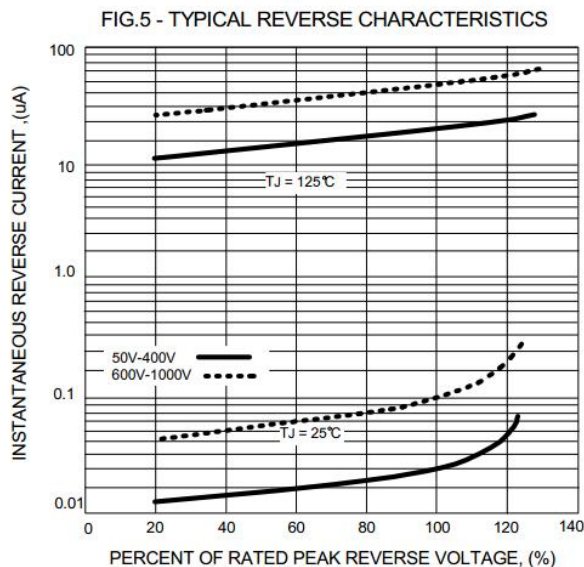
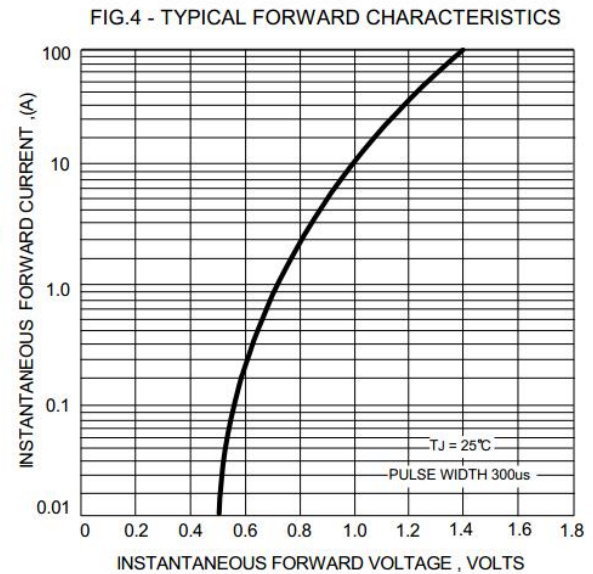
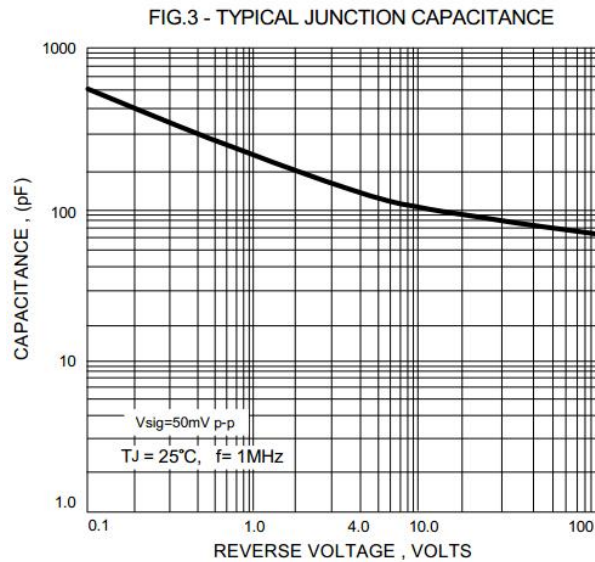
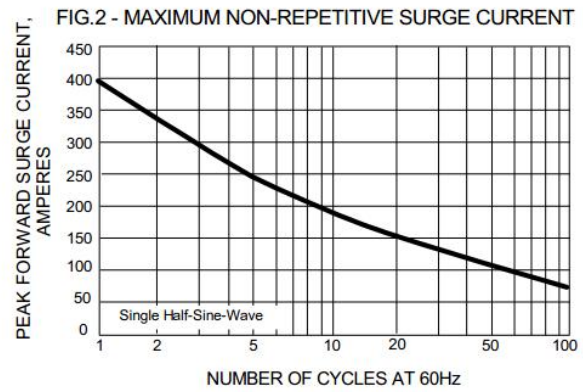
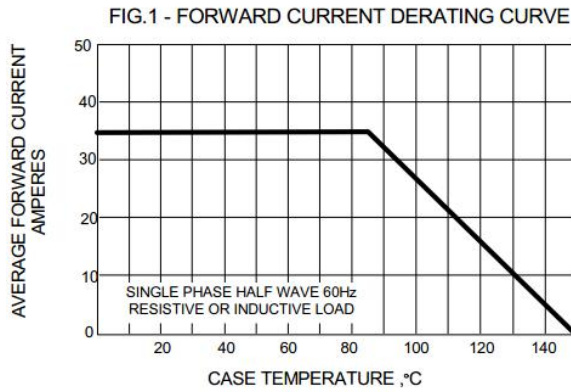
PARAMETER	SYMBOL	GBPC 35005	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ $T_C=110^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	35.5							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	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at Rated DC Blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
$I^2t$ Rating for fusing( $t<8.3\text{ms}$ )	$I^2t$	660							$\text{A}^2\text{S}$
Typical Junction Capacitance per element(Note 1)	$C_J$	300							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

- Note : 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.  
 2. Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.  
 3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

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## RATING AND CHARACTERISTIC CURVES GBPC35005 THRU GBPC3510



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.