

**Kingtronics**®**GBPC35005W THRU  
GBPC3510W****SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS****REVERSE VOLTAGE 50 to 1000 Volts****FORWARD CURRENT 35 Ampere****FEATURES**

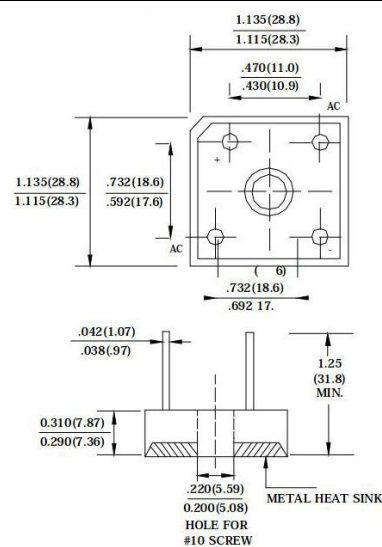
- Rating to 1000V PRV
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat dissipation
- The plastic material has UL flammability classification 94V-0
- Electrically isolated base-2500 Volts

**MECHANICAL DATA**

- Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation
- Polarity: As marked on Body
- Mounting : Hole for # 10 screw
- Weight : 0.47 ounces , 13.4 grams (wire)

**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%

**Dimensions in inches and (millimeters)**

PARAMETER	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(with heatsink Note 2) Rectified Current @ $T_C=110^{\circ}C$ (without heatsink)	$I_{(AV)}$	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	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at Rated DC Blocking voltage @ $T_J=125^{\circ}C$	$I_R$	5.0							$\mu A$
$I^2t$ Rating for fusing( $t<8.3ms$ )	$I^2t$	660							$A^2S$
Typical Junction Capacitance per element(Note 1)	$C_J$	150							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							$^{\circ}C/W$
Operating Temperature Range	$T_J$	-55 to +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

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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# Kingtronics®

# GBPC35005W THRU GBPC3510W

## RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

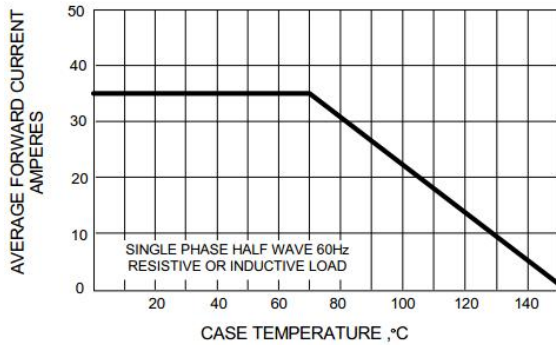


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

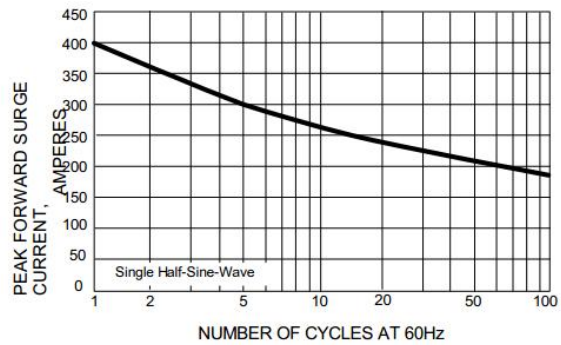


FIG.3 - TYPICAL JUNCTION CAPACITANCE

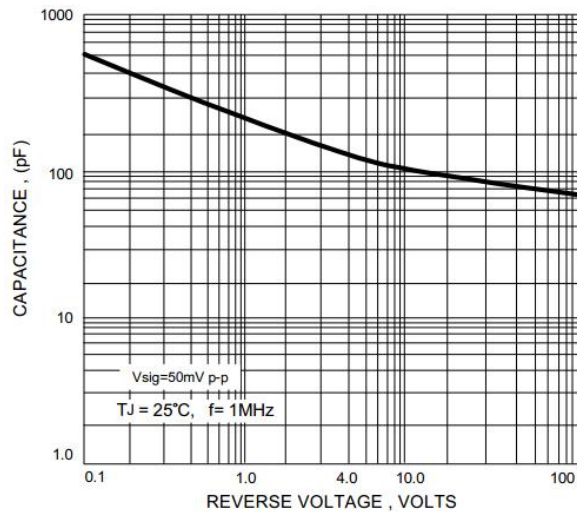


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

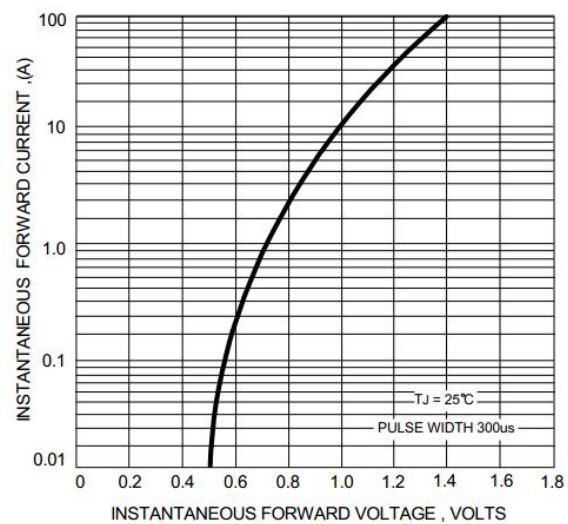
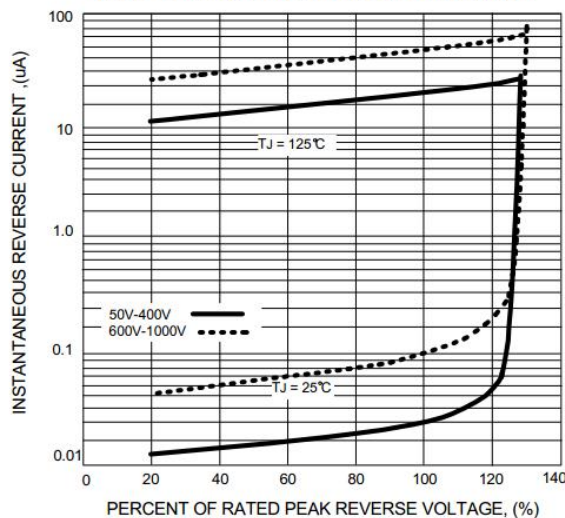


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice.

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