

**Kingtronics**®**GBPC25005W THRU  
GBPC2510W****SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS****REVERSE VOLTAGE 50 to 1000 Volts****FORWARD CURRENT 25 Ampere****FEATURES**

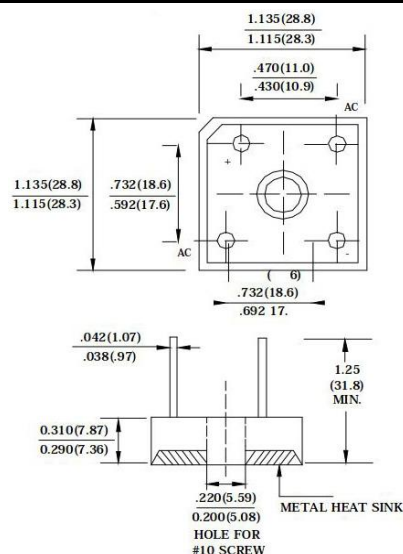
Rating to 1000V PRV  
 High efficiency  
 Glass passivated chip junction  
 Electrically isolated metal case for maximum heat dissipation  
 The plastic material has UL flammability classification 94V-0  
 Electrically isolated base-2500 Volts

**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 25005W	GBPC 2501W	GBPC 2502W	GBPC 2504W	GBPC 2506W	GBPC 2508W	GBPC 2510W	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)	$I_{(AV)}$	25.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	300							A
Maximum forward Voltage at 12.5A 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( $t<8.3\text{ms}$ )	$I^2t$	508							$\text{A}^2\text{S}$
Typical Junction Capacitance per element(Note 1)	$C_J$	130							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.9							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

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.

**Kingtronics**® International CompanyWebsite: [www.kingtronics.com](http://www.kingtronics.com)Email: [info@kingtronics.com](mailto:info@kingtronics.com)

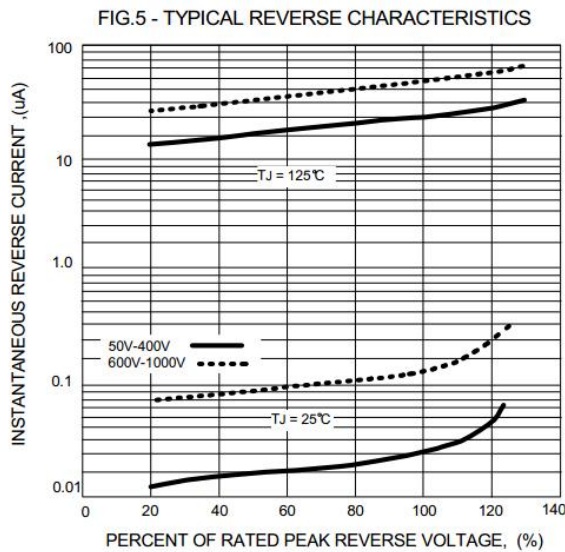
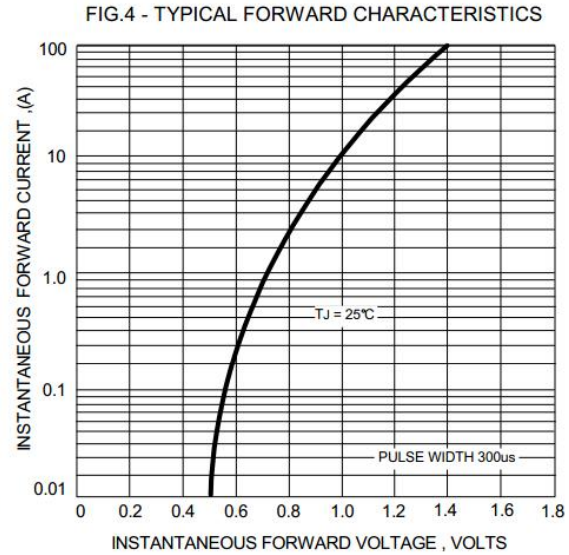
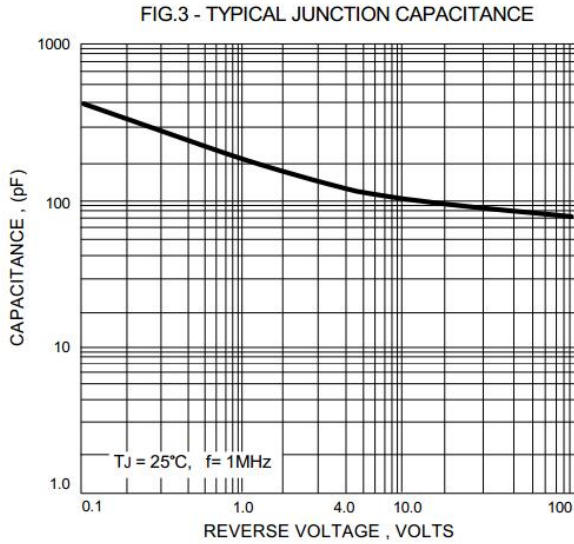
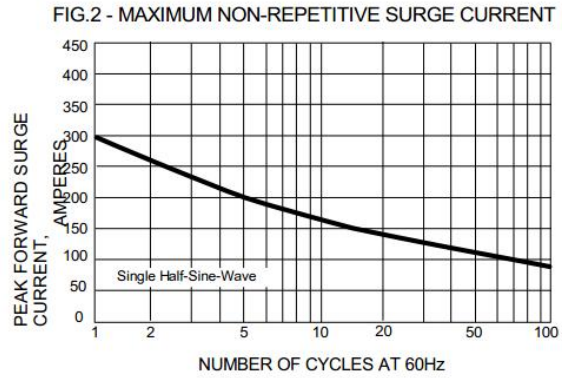
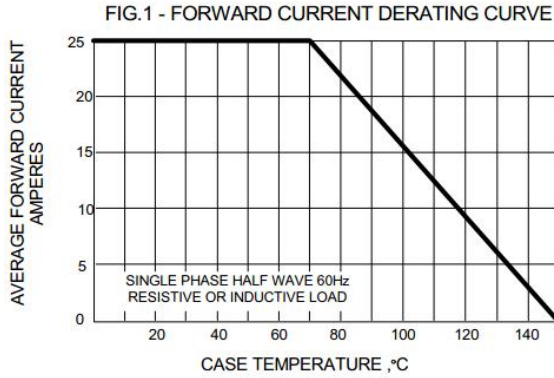
Tel: (852) 8106 7033

Fax: (852) 8106 7099

# Kingtronics®

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## RATINGS AND CHARACTERISTIC CURVES



Note: Specifications are subject to change without notice.

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