

### GBPC15005 THRU GBPC1510

#### SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

**REVERSE VOLTAGE** 50 to 1000 Volts

**FORWARD CURRENT** 15 Ampere

**GBPC** 

#### **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)

# 1.135(28.8) 1.115(28.3) 0.72(17.1) 6.32(16.1) 1.135(28.8) 1.115(28.3) 0.72(17.1) 6.32(16.1) 0.094(2.4) DIA. 0.034(.86) 0.030(.76) 0.030(.76) 0.034(.86) 0.030(.76) 0.034(.86) 0.030(.76) 0.034(.86) 0.030(.787) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86) 0.034(.86)

#### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25℃ ambient temperature unless otherwise specified , Single phase, half wave, 60Hz, resistive or inductive load. Dimensions in inches and (millimeters)

For capacitive load derate current by 20%

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PARAMETER	SYMBOL	GBPC 15005	GBPC 1501	GBPC 1502	GBPC 1504	GBPC 1506	GBPC 1508	GBPC 1510	UNIT
Maximum Recurrent Peak Reverse	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T <sub>C</sub> =110℃(without	I <sub>(AV)</sub>				15.0				А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300							А
Maximum forward Voltage at 7.5A DC	$V_{F}$	1.1							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking voltage @T <sub>J</sub> =125°C	<b>I</b> R	5.0 500							uA
I <sup>2</sup> t Rating for fusing(t<8.3ms)	l <sup>2</sup> t	374							$A^2S$
Typical Junction Capacitance per element(Note 1)	CJ	300							pF
Typical Thermal Resistance (Note 2)	Rелс	1.9							℃W
Operating Temperature Range	TJ	-55 to +150							$^{\circ}\mathbb{C}$
Storage Temperature Range	Тѕтс	-55 to +150							°C

- 1- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 2- Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
- 3-Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

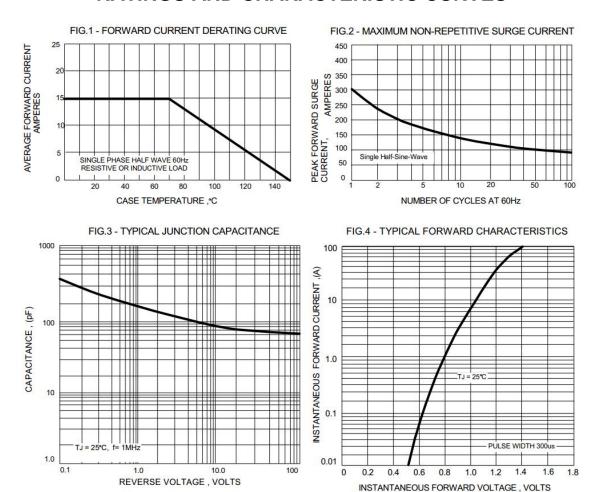
#### Kingtronics<sup>®</sup> International Company

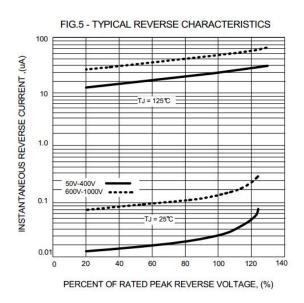
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## Kingtronics®

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#### RATINGS AND CHARACTERISTIC CURVES





Note: Specifications are subject to change without notice.

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