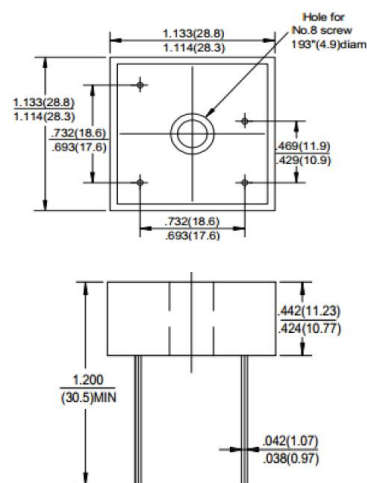


**Kingtronics**®**KBPC10005W THRU  
KBPC1010W****SINGLE-PHASE BRIDGE RECTIFIER****REVERSE VOLTAGE 100 to 1000 Volts    FORWARD CURRENT 10.0 Ampere****FEATURES**

High overload surge current capability  
 Low thermal resistance  
 High isolation voltage from case to leads  
 High temperature soldering guaranteed:  
 260°C/10 second, at 5 lbs. (2.3kg) tension

**MECHANICAL DATA**

Case: Metal case  
 Terminal: Plated lead 0.04" (1.02mm) diameter  
 Polarity: Polarity symbols marked on case  
 Mounting: Thru hole for #8 screw, 20 in,- lbs. Torqute Max  
 Weight: 0.93 ounce, 26.4gram

**KBPC-W****Dimensions in inches and (millimeters)****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%

PARAMETER	SYMBOL	KBPC 10005W	KBPC 1001W	KBPC 1002W	KBPC 1004W	KBPC 1006W	KBPC 1008W	KBPC 1010W	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RRM}$	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 Rectified Output Current @ $T_C=55^\circ\text{C}$ (Note1, 2)	$I_{(AV)}$	10.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	240.0							A
Maximum instantaneous forward voltage at 5.0 A	$V_F$	1.0							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=150^\circ\text{C}$	$I_R$	5.0 0.5							uA mA
Isolation Voltage from case to lug	$V_{ISO}$	2500							$V_{AC}$
Typical Thermal Resistance (Note 1,2)	$R_{qJC}$	2.0							$^\circ\text{C/W}$
Operating Temperature range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

1- Unit mounted on 5"x4"x3" thick (12.8mmx10.2mmx7.3mm) Al. plate.

2- Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

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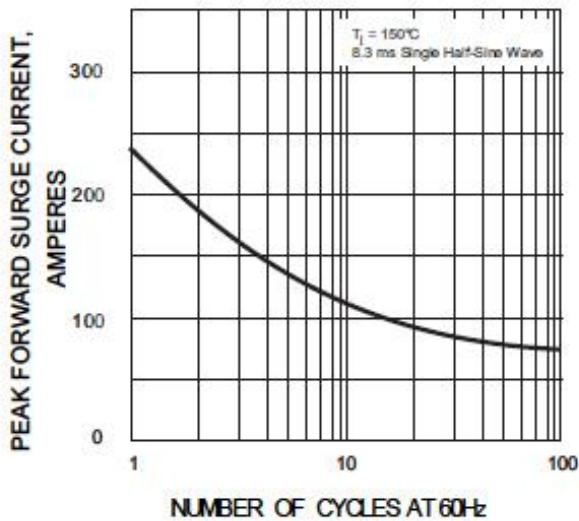
Website: [www.kingtronics.com](http://www.kingtronics.com)    Email: [info@kingtronics.com](mailto:info@kingtronics.com)    Tel: (852) 8106 7033    Fax: (852) 8106 7099

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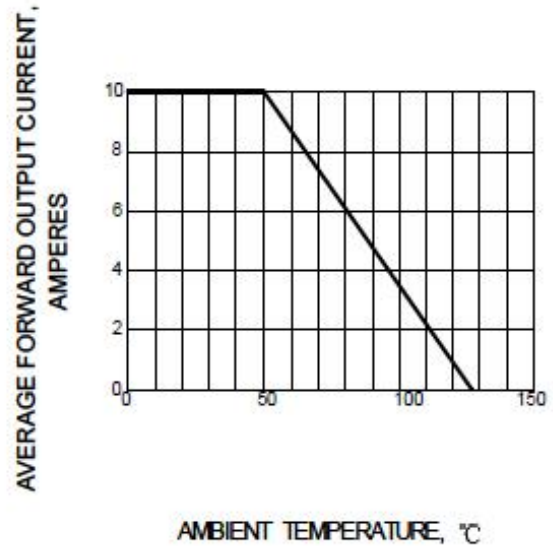
# KBPC1005W THRU KBPC1010W

## RATINGS AND CHARACTERISTIC CURVES

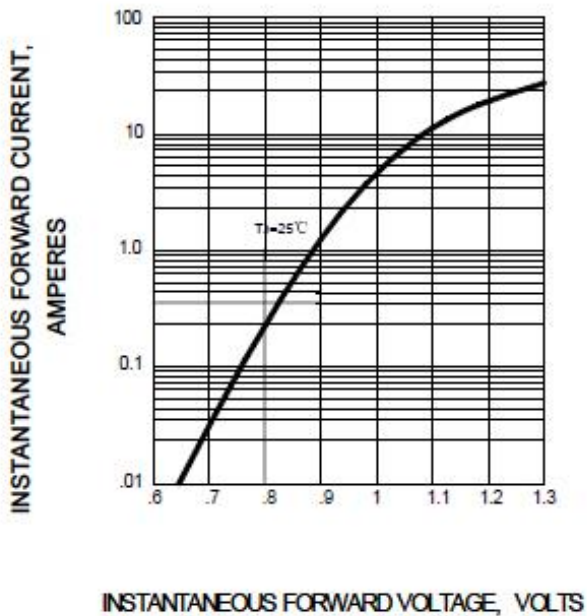
**FIG.1 – PEAK FORWARD SURGE CURRENT**



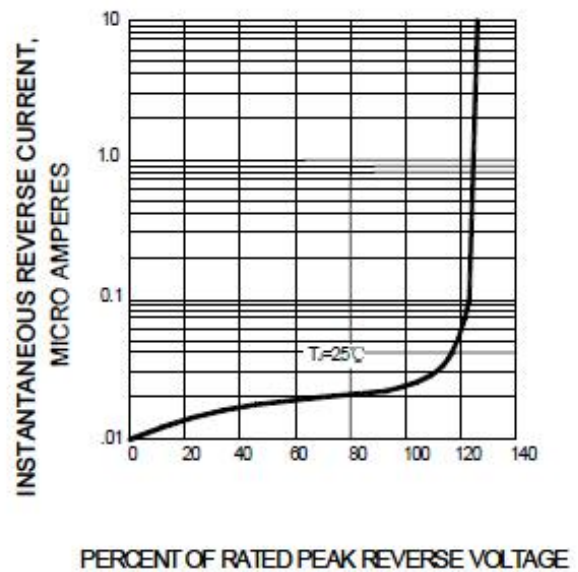
**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 – TYPICAL REVERSE CHARACTERISTIC**



Note: Specifications are subject to change without notice.

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