



## MASTER INSTRUMENT CORPORATION

**KBPC1505WN THRU KBPC1510WN**

**VOLTAGE RANGE 50 to 1000 Volts**  
**CURRENT 15 Amperes**

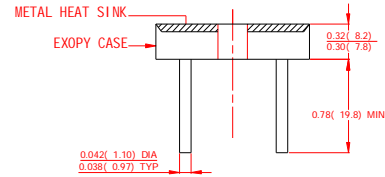
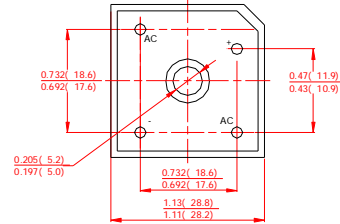
**FEATURES**

- l Low cost
- l This series is UL recognized under component index, file number E127707
- l High forward surge current capability
- l Integrally molded heatsink provide very low thermal resistance
- l High isolation voltage from case to lugs
- l High temperature soldering guaranteed: 260°C/10 second, at 5 lbs. (2.3kg) tension.

**MECHANICAL DATA**

- l Case: Molded plastic body
- l Terminal: Lead solderable per MIL-STD-202E method 208C.
- l Polarity: Polarity symbols molded on case
- l Mounting: Thru hole for #6 screw, 5.0 in.-lbs torque max.
- l Weight: 0.47ounce, 13.4 grams

**BR-35WN**



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%.

	SYMBOLS	KBPC 15005WN	KBPC 1501WN	KBPC 1502WN	KBPC 1504WN	KBPC 1506WN	KBPC 1508WN	KBPC 1510WN	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at T <sub>C</sub> =55°C (Note 1, 2)	I <sub>(AV)</sub>	15							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	300							Amps
Rating for Fusing (t<8.3ms)	I <sup>2</sup> T	373							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage at 7.5A	V <sub>F</sub>	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T <sub>A</sub> =25°C	10							μAmps
	T <sub>A</sub> =150°C	1.0							mAmps
Isolation Voltage from case to lug	V <sub>ISO</sub>	2500							V <sub>AC</sub>
Typical Thermal Resistance (Note 1,2)	R <sub>θJC</sub>	2.0							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

**NOTES:**

1. Unit mounted on 5"×4"×3" thick (12.8mm×10.2mm×7.3mm) 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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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

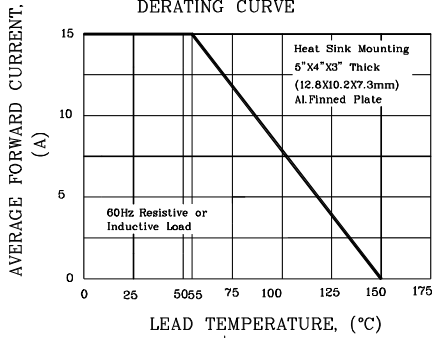


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

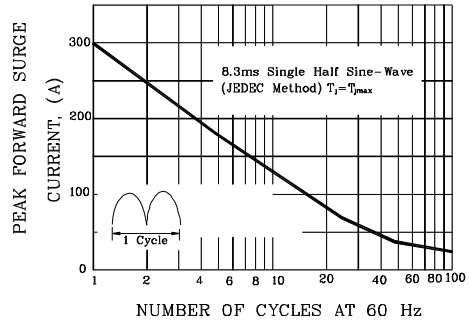


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

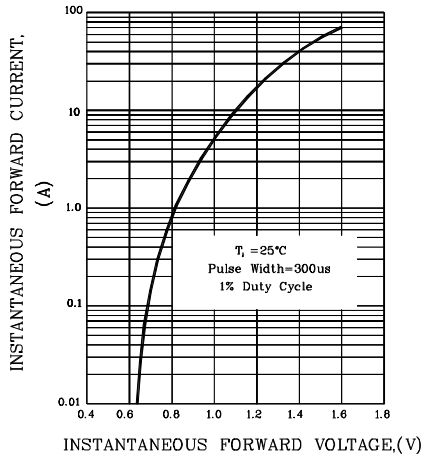


FIG.4-TYPICAL REVERSE CHARACTERISTICS

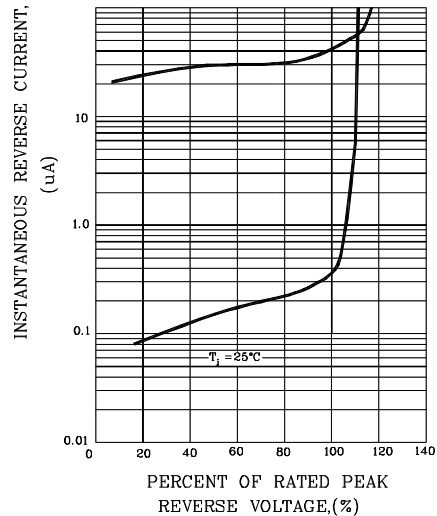


FIG.5-TYPICAL JUNCTION CAPACITANCE

