



## MASTER INSTRUMENT CORPORATION

**SINGLE-PHASE BRIDGE RECTIFIER  
KBPC3505NW THRU KBPC3510NW**

**VOLTAGE RANGE 50 to 1000 Volts  
CURRENT 35 Amperes**

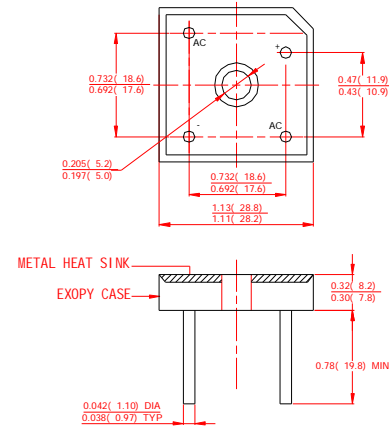
**FEATURES**

- | Low cost
- | This series is UL recognized under component index, file number E127707
- | High forward surge current capability
- | Integrally molded heatsink provide very 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: Molded plastic body
- | Terminal: Plated lead 0.25"(6.35mm)lug.
- | Polarity: Polarity symbols marked on case
- | Mounting: Thru hole for #10 screw, 20 in.-lbs torque max.
- | 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 3505NW	KBPC 3501NW	KBPC 3502NW	KBPC 3504NW	KBPC 3506NW	KBPC 3508NW	KBPC 3510NW	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at $T_C=50^\circ C$ (Note1)	$I_{(AV)}$	35							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							Amps
Rating for Fusing( $t < 8.3ms$ )	$I^2T$	373							$A^2S$
Maximum Instantaneous Forward Voltage at 17.5A	$V_F$	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ C$	10							$\mu Amps$
	$T_A=100^\circ C$	1.0							mAmps
Isolation Voltage from case to leads	$V_{ISO}$	2500							$V_{AC}$
Typical Thermal Resistance (Note 1, 2)	$R_{\theta JC}$	2.0							$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

**NOTES:**

1. Unit mounted on 9"×3.5"×4.6" thick (23cm×9cm×11.8cm) 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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RATINGS AND CHARACTERISTIC CURVES KBPC35005NW THRU KBPC3510NW

