



SINGLE-PHASE BRIDGE RECTIFIER

KBPC35005WN	BR3505W
THRU	THRU
KBPC3510WN	BR3510W

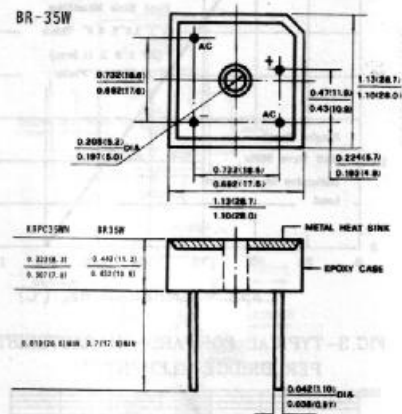
FEATURES

- 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 seconds, at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Molded plastic body, suffix "N" for thinnertype
- Terminal: Plated lead 0.04" (1.02mm) diameter
- Polarity: Polarity symbols marked on case
- Mounting: Thru hole for #10 screw, 20 in. - lbs. torque max.
- Weight: 0.61 ounce, 17.4 grams (BR35W)
0.47 ounce, 13.4 gram (KBPC35WN)

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 35 Amperes



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	BR 3505W	BR 351W	BR 352W	BR 354W	BR 356W	BR 358W	BR 3510W	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 $T_C=50^\circ\text{C}$ (Note 1,2)	$I_{(AV)}$	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 ($t < 8.3\text{ms}$)	I^2t	664							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 17.5A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	I_R	10							μAmps
		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							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ\text{C}$

NOTES:

1. Unit mounted on 9" × 3.5" × 4.6" (23cm × 9cm × 11.8cm) Al. finned 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

KBPC35005WN
BR3505W

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BR3510W

