



MASTER INSTRUMENT CORPORATION

SINGLE-PHASE BRIDGE RECTIFIER KBPC2505NW THRU KBPC2510NW

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 25 Amperes

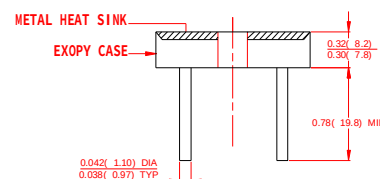
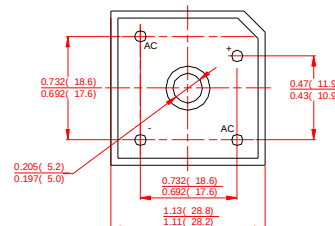
FEATURES

- 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 lugs
- High temperature soldering guaranteed:
260°C/10 second, at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Molded plastic body
- Terminal: Lead solderable per MIL-STD-202E method 208C.
- Polarity: Polarity symbols molded on case
- Mounting: Thru hole for #6 screw, 5.0 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 25005NW	KBPC 2501NW	KBPC 2502NW	KBPC 2504NW	KBPC 2506NW	KBPC 2508NW	KBPC 2510NW	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 °C(Note1, 2)	I _(AV)	25							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	300							Amps
Rating for Fusing(t<8.3ms)	I ² T	373							A ² S
Maximum Instantaneous Forward Voltage at 12.5A	V _F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T _A =25 °C	I _R	10						µAmps
	T _A =150 °C		1.0						mAmps
Isolation Voltage from case to leads	V _{ISO}	2500							V _{AC}
Typical Thermal Resistance (Note 1, 2)	R _{θJC}	2.0							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES:

- Unit mounted on 5"×6"×4.9" thick (12.8mm×15.2mm×12.4mm) Al. plate.
- 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 KBPC2505NW THRU KBPC2510NW

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

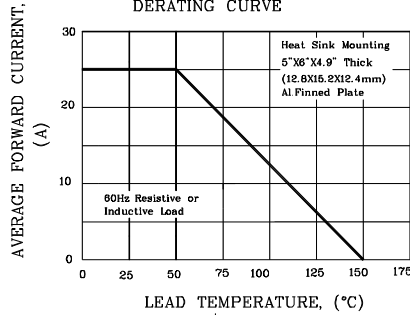


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

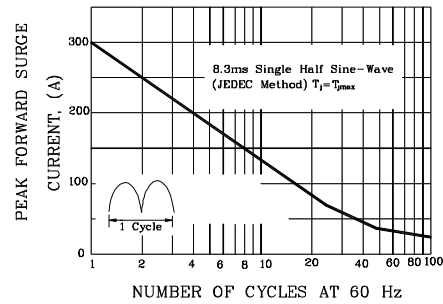


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

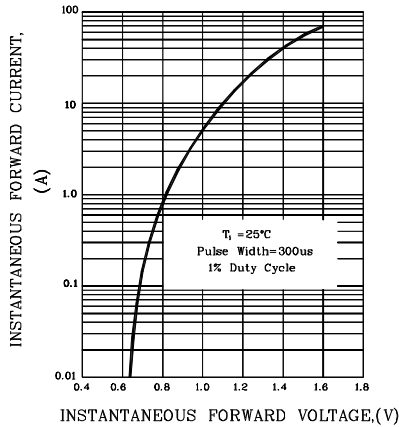


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

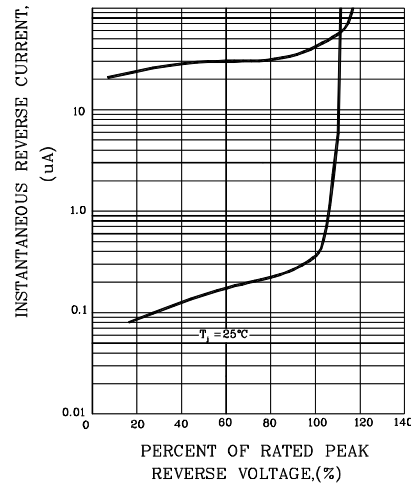


FIG.5-TYPICAL JUNCTION CAPACITANCE

