

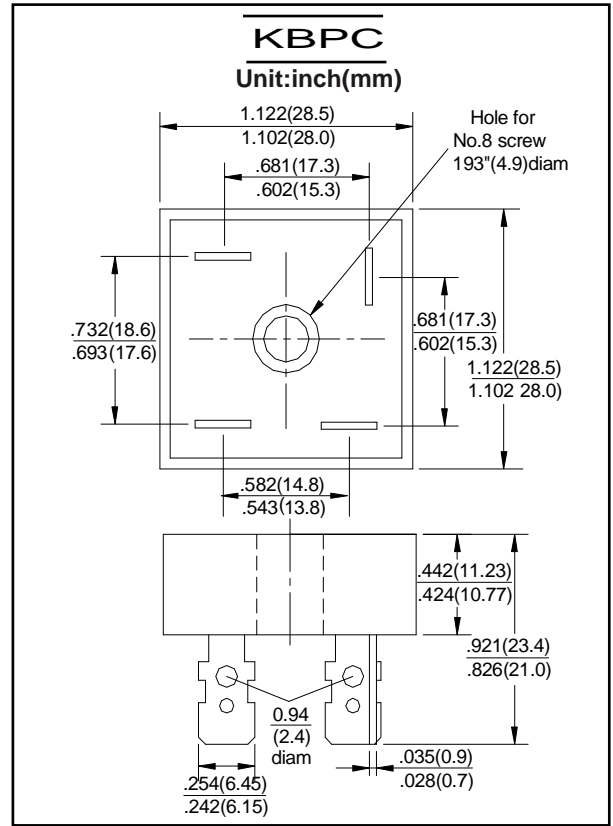
**KBPC50005 THRU KBPC5010
SINGLE-PHASE BRIDGE RECTIFIER**



VOLTAGE RANGE 50 to 1000 Volts
CURRENT 50.0 Ampere

FEATURES

- 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: Metal case
- Terminal: Plated 0.25" (6.35mm) lug.
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #8 screw, 20 in.- lbs. Torque Max.
- Weight: 1.02 ounce, 29gram

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	KBPC50005	KBPC5001	KBPC5002	KBPC5004	KBPC5006	KBPC5008	KBPC5010	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 (Note 1,2)	I _(AV)	50							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 ² T	664							A ² S
Maximum Instantaneous Forward Voltage at 25A	V _F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T _A =25°C	5.0							μAmps
	T _A =125°C	1.0							mAmps
Isolation Voltage from case to lugs	V _{ISO}	2500							V _{AC}
Typical Thermal Resistance (Note 1,2)	R _{θJC}	2.0							°C/W
Operating Temperature Range	T _J	-55 to +125							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES:

1. Unit mounted on 9"×3.5"×4.6"(23×9×11.8mm) 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.

RATINGS AND CHARACTERISTIC CURVES KBPC50005 THRU KBPC5010

