

KBPC50005 THRU KBPC5010

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 50.0 Ampere

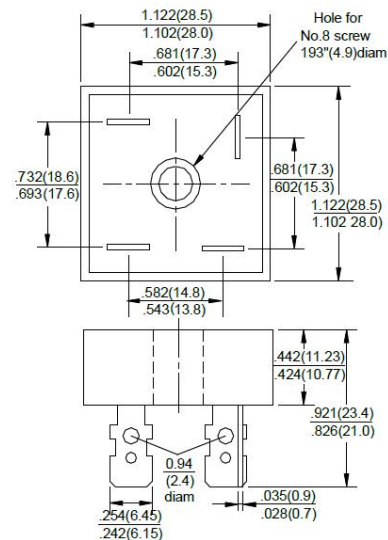
FEATURES

- ◆ 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, 29 gram

KBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load derate current by 20%

	SYMBOL	KBPC 50005	KBPC 5001	KBPC 5002	KBPC 5004	KBPC 5006	KBPC 5008	KBPC 5010	UNIT	
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 $T_C=50^\circ C$ (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^2t	664							A^2S	
Maximum Instantaneous Forward Voltage at 25A	V_F	1.1							Volts	
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ C$	I_R							5.0	μA mps
	$T_A=125^\circ C$								1.0	mAmps
Isolation Voltage from case to lugs	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 +125							$^\circ C$	
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$	

Note: 1. Unit mounted on 9"×3.5"×4.6" (23×9×11.8mm) Al. finned plate.

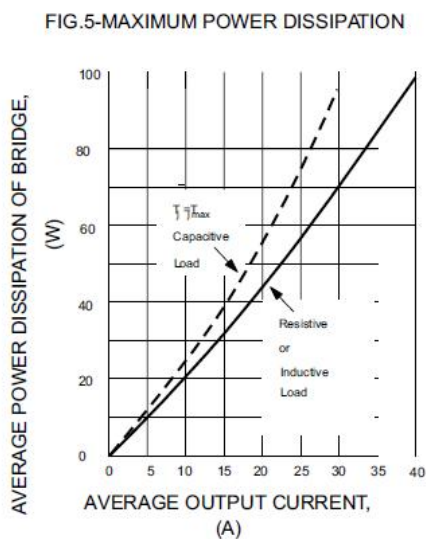
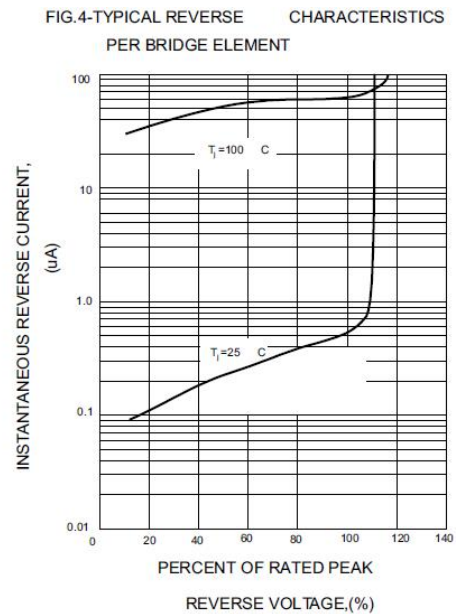
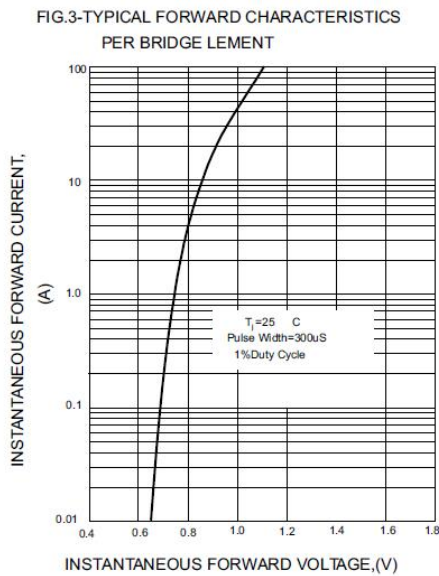
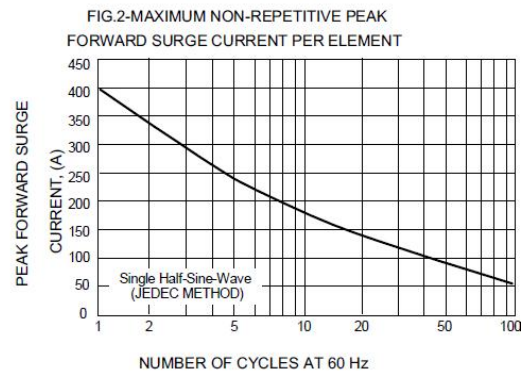
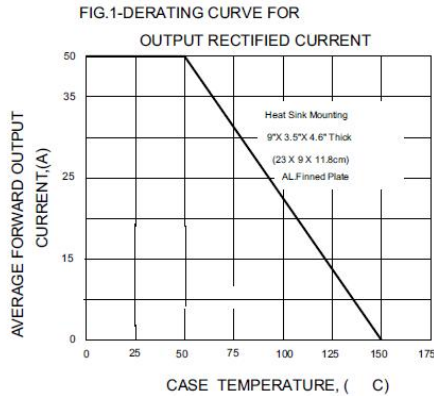
2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

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RATING AND CHARACTERISTIC CURVES KBPC50005 THRU KBPC5010



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.