KBPC6005 THRU KBPC610

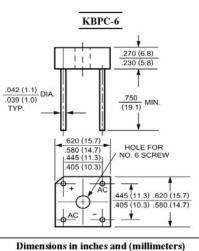
SINGLE PHASE SILICON BRIDGE RECTIFIER Reverse Voltage: 50 to 1000 V Forward Current: 6 A

Features

- Reliable low cost construction
- · Ideal for printed circuit board
- · Low forward voltage drop
- · Low reverse leakage current
- · High surge current capability

Mechanical Data

- Case: Molded plastic, KBPC-6
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting Position: Any



Dimensions in menes and (minimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	KBPC6005	KBPC601	KBPC602	KBPC604	KBPC606	KBPC608	KBPC610	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current T_{C} = 50 °C	I _{F(AV)}	6							А
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	200							A
Maximum Forward Voltage Per Element at 3 A	V _F	1						V	
Maximum Reverse Current at $T_a = 25 \circ C$ Rated DC Blocking Voltage $T_a = 100 \circ C$	I _R	10 500							μA
Typical Junction Capacitance ¹⁾	CJ	186							pF
Typical Thermal Resistance 2)	$R_{ extsf{ heta}JA}$	22							°C/W
Typical Thermal Resistance 3)	$R_{ extsf{ heta}JC}$	7.3							°C/W
Operating and Storage Temperature Range	T _J , T _S	- 55 to + 125							°C

 $^{1)}$ Measured at 1 MHz and applied reverse voltage of 4 V

²⁾ Unit mounted on 5.5 X 6 X 0.11" (14 X 15 X 0.3 cm) thick Al. Plate

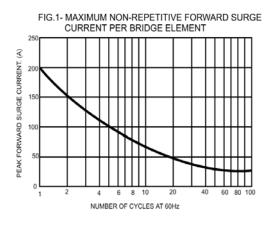
³⁾ Unit mounted on P.C.B. at 0.375" (9.5 mm) lead length with 0.5 X 0.5" (12 X 12 mm) copper pads



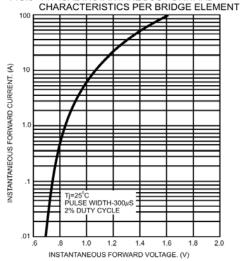




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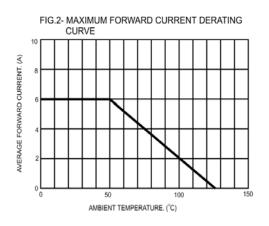
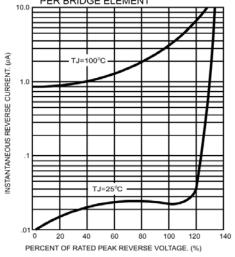


FIG.4- TYPICAL REVERSE CHARACTERISTICS









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