



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

KBPC / BR605
6005
THRU
KBPC / BR610
610

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts
CURRENT - 6.0 Amperes

FEATURES

- * Surge overload rating: 125 Amperes peak
- * Low forward voltage drop
- * Small size: simple installation

MECHANICAL DATA

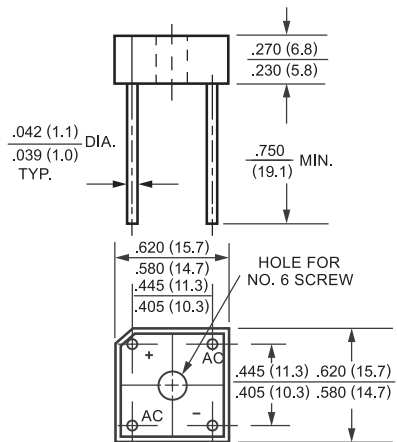
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 6.1 grams

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%.



BR-6



Dimensions in inches and (millimeters)

	SYMBOL	KBPC 6005	KBPC 601	KBPC 602	KBPC 604	KBPC 606	KBPC 608	KBPC 610	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	BR605	BR61	BR62	BR64	BR66	BR68	BR610	Volts	
Maximum RMS Bridge Input Voltage	V _{RMS}	50	100	200	400	600	800	1000	Volts	
Maximum DC Blocking Voltage	V _{DC}	35	70	140	280	420	560	700	Volts	
Maximum Average Forward Rectified Output Current at T _c = 50 °	I _O	50	100	200	400	600	800	1000	Volts	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	6.0								Amps
Maximum Forward Voltage Drop per element at 3.0A DC	V _F	1.0								Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I _R	@ T _A = 25 °C				10				uAmps
		@ T _C = 100 °C				500				
I ² t Rating for Fusing (t<8.3ms)	I ² t	127								A ² Sec
Typical Junction Capacitance (Note1)	C _J	186								pF
Typical Thermal Resistance (Note 2)	R _{θJA}	22								°C/W
Operating Temperature Range	T _J	-55 to + 125								°C
Storage Temperature Range	T _{STG}	-55 to + 150								°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13x13mm) copper pads.

