



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F, EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 2790-0314 FAX: 2790-0206



SINGLE-PHASE BRIDGE RECTIFIER

KBPC6005 THRU KBPC610  
BR605 THRU BR610

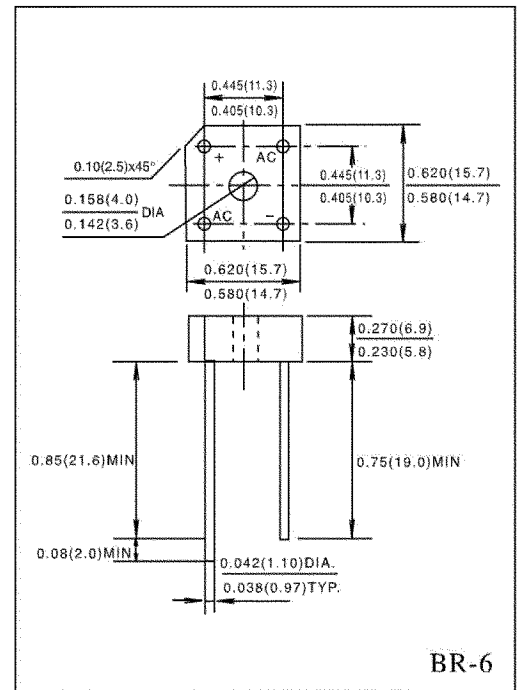
VOLTAGE RANGE 50 to 1000 Volts  
CURRENT 6.0 Ampere

**FEATURES**

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High isolation voltage from case to leads.
- 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 marked on case.
- Mounting: Thru hole for #6 screw, 5 in.- lbs. Torqute Max.
- Weight: 0.13 ounce, 3.66 gram



**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	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	UNIT
		6005	601	602	604	606	608	610	
		BR605	BR61	BR62	BR64	BR66	BR68	BR610	
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	$I_{(AV)}$	6.0							Amps
$T_C = 50^\circ C$ (Note1)									
	$T_A = 25^\circ C$ (Note2)	3.0							
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method )	$I_{FSM}$	125							Amps
Rating for Fusing (t<8.3ms)	$I^2t$	64							$A^2s$
Maximum Instantaneous Forward Voltage Drop per bridge element at 3.0A	$V_F$	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$I_R$	10							$\mu A$
$T_A = 25^\circ C$		1.0							mA
Isolation Voltage from case to leads.	$V_{ISO}$	2500							$V_{AC}$
Typical Thermal Resistance(Note 1)	$R_{\theta JC}$	8.0							$^\circ C/W$
Operating Temperature Range	$T_J$	(-55 to +125)							$^\circ C$
Storage Temperature Range	$T_{STG}$	(-55 to +150)							

1. Unit mounted on 6.0" X 5.5" X 0.11" thick (15 X 14 X 0.3cm) Al. Plate.

2. Unit mounted on P.C. Borad 0.375" (9.5mm) lead length with 0.47" X 0.47" (12 X 12mm) copper pads.



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RATINGS AND CHARACTERISTIC CURVES

KPBC6005 KPBC610  
BR605 THRU BR610

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

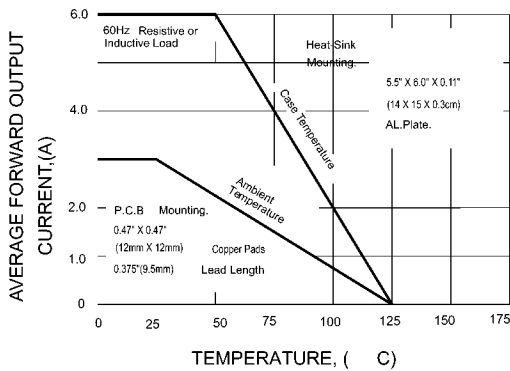


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENT

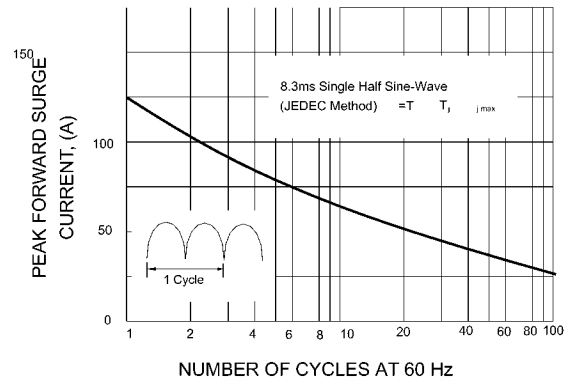


FIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENT

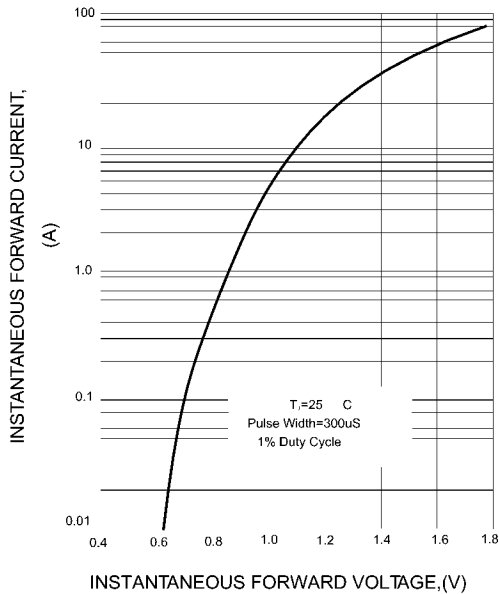


FIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENT

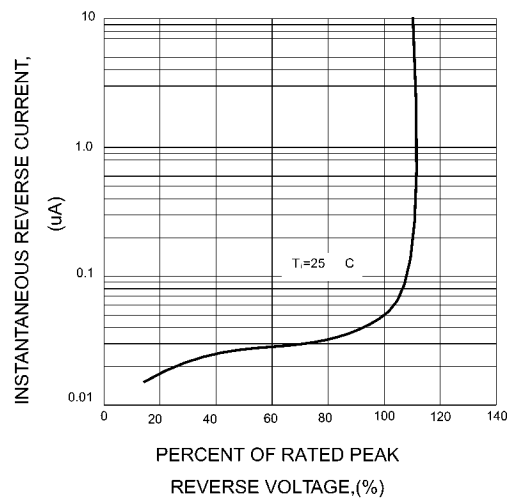


FIG.5-TYPICAL JUNCTION CAPACITANCE  
PER BRIDGE ELEMENT

