



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: 852-2790 0314 FAX: 852-2790 0206



SINGLE-PHASE BRIDGE RECTIFIER

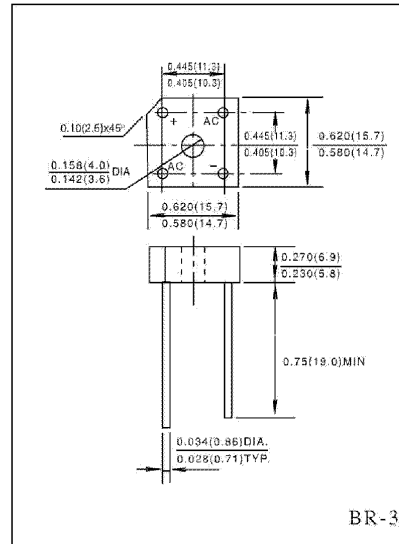
BR305	THRU	BR310	VOLTAGE RANGE	50 to 1000 Volts
KBPC1005	THRU	KBPC110	CURRENT	3.0 Ampere

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 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, 5in. - lbs. Torque max.
- Weight: 0.093 ounce, 2.62 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	KBPC1005	KBPC101	KBPC102	KBPC104	KBPC106	KBPC108	KBPC110	UNIT	
		BR305	BR31	BR32	BR34	BR36	BR38	BR310		
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	$I_{(AV)}$	$T_C = 50^\circ\text{C}$ (Note2)							3.0	Amps
		$T_A = 25^\circ\text{C}$ (Note3)							2.0	
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}								60	Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t								15	A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 1.5A	V_F								1.0	Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	I_R	$T_A = 25^\circ\text{C}$							10	μA
		$T_A = 100^\circ\text{C}$							0.5	mA
Typical Junction Capacitance per element (Note 1)	C_j								20	pF
Typical Thermal Resistance per element (Note 2)	$R_{\theta JA}$								12	$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J								(-55 to +125)	$^\circ\text{C}$
Storage Temperature Range	T_{STG}								(-55 to +150)	

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 4.0" X 4.0" X 0.11" thick (10.5 X 10.5 X 0.3cm) Al. plate.
3. Unit mounted on P.C.B. at 375" (9.5mm) lead length with 0.5" X 0.5" (12 X 12mm) copper pads.



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: 852-2790 0314 FAX: 852-2790 0206

RATINGS AND CHARACTERISTIC CURVES

KBPC1005 THRU KBPC110
BR305 BR310

FIG.1-DERATING CURVE FOR
OUTPUT DERTAINING CURVE

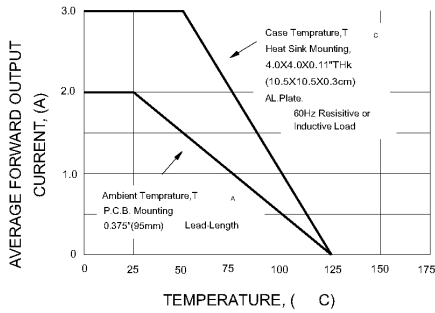


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

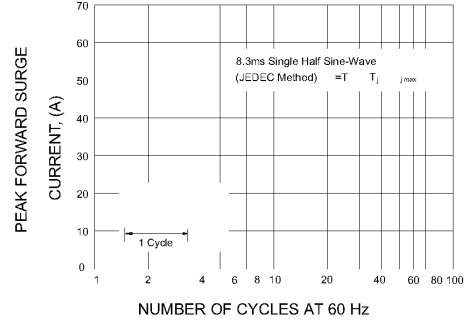


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

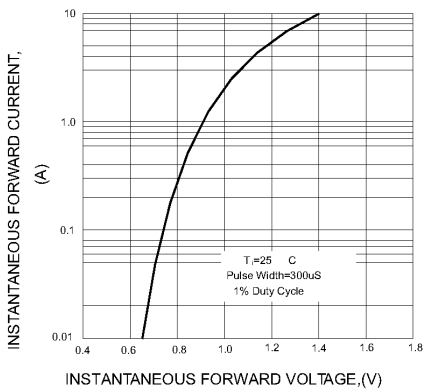


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

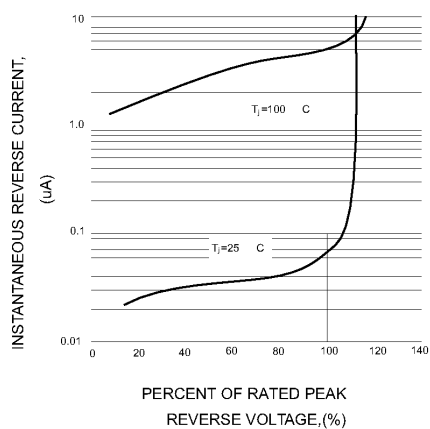


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

