

Kingtronics®**KBP2005 THRU
KBP210****SINGLE-PHASE BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Ampere**FEATURES**

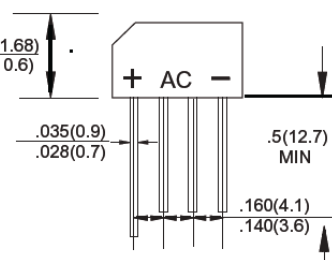
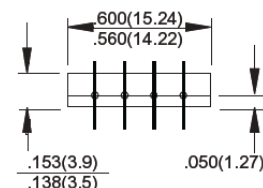
High forward surge current capability.
Ideal for printed circuit board.
High temperature soldering guaranteed:
260°C/10 second, 0.375" (9.5mm) lead length
at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

Case: Transfer molded plastic.
Terminal: Lead solderable per MIL - STD - 202E
method 208°C.
Polarity: Polarity symbols marked on case
Mounting position: Any.
Weight: 0.069 ounce, 1.95 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%

KBP**Dimensions in inches and (millimeters)**

PARAMETER	SYMBOL	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	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 $T_A = 50^\circ\text{C}$ (Note 2)	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 2.0A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A = 25^\circ\text{C}$	5							μA
	$T_A = 100^\circ\text{C}$	0.5							mA
Typical Junction Capacitance (Note 1)	C_j	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	28							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-65 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							

1- Measured at 1 MHz and applied reverse voltage of 4 V.

2- Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5 X 0.5" (13 X 13 mm) copper pads.

Kingtronics® International Company

RATINGS AND CHARACTERISTIC CURVES

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

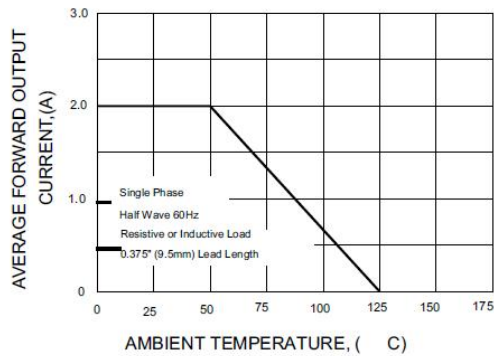


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

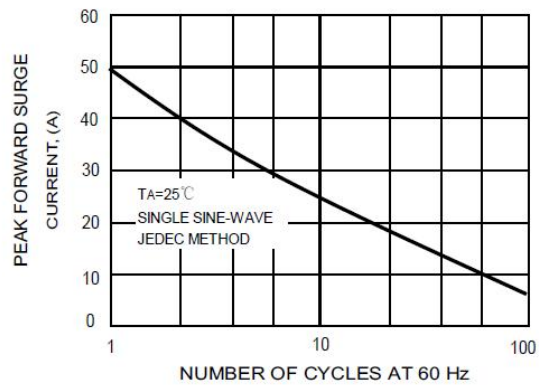


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

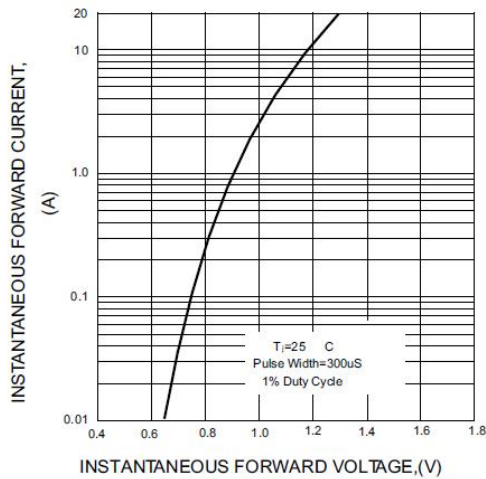


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

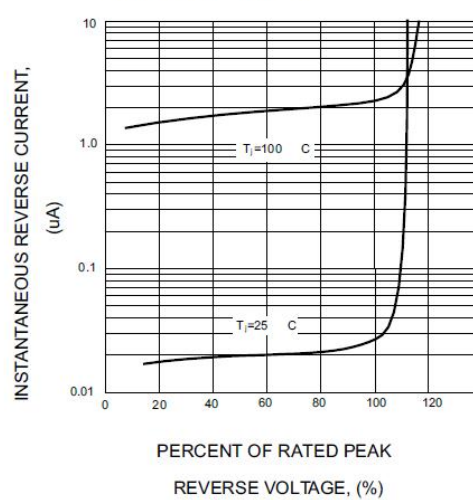
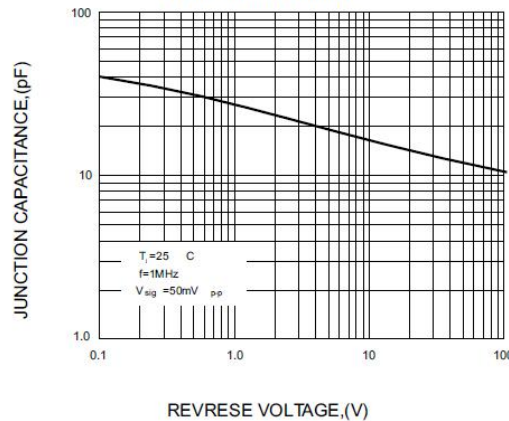


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice.