

KBP3005 THRU KBP310

CURRENT 3.0 Amperes
VOLTAGE 50 to 1000 Volts

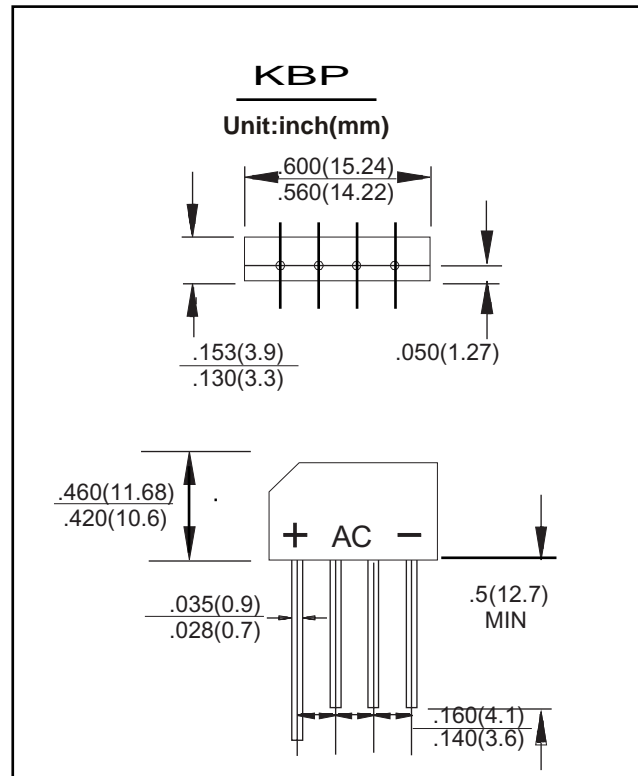
GLASS PASSIVATED BRIDGE RECTIFIERS

FEATURES

- Low cost
- 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.
- Electrically isolated base-1500 Vlots

MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL - STD - 202E method 208C
- 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%

	SYMBOLS	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	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)	$I_{(AV)}$	3.0							Amps
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	10							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 3.0A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A = 25^\circ\text{C}$	10							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							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	(-55 to +150)							$^\circ\text{C}$
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 P.C. board with 0.47" X 0.47" (12 X12 mm) copper pads, .375" (9.5mm) lead length.



WEET Technology Company Limited

Single Phase Bridge Rectifiers

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FIG.1-DERATING CURVE FOR
 OUTPUT RECTIFIED CURRENT

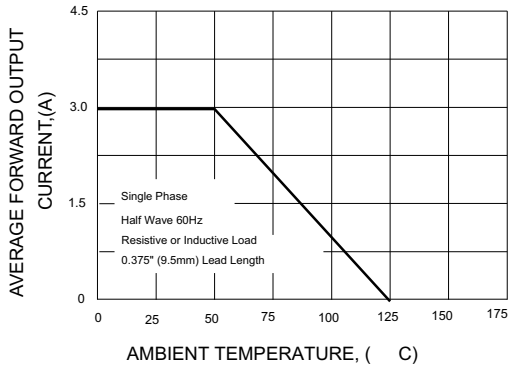


FIG.2-MAXIMUM NON-REPETITIVE PEAK
 FORWARD SURGE CURRENT PER ELEMENT

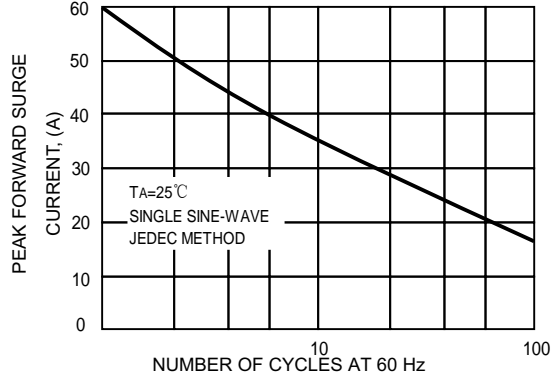


FIG.3-TYPICAL FORWARD CHARACTERISTICS
 PER BRIDGE ELEMENT

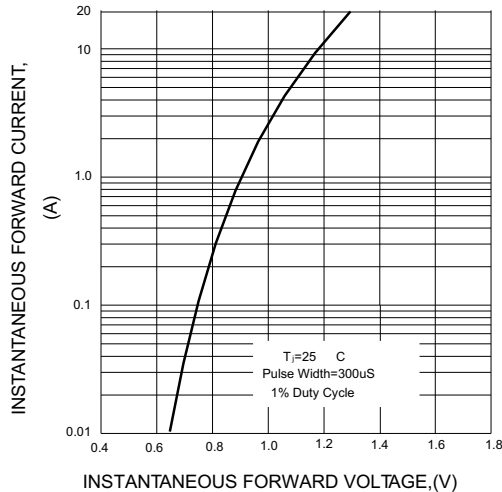


FIG.4-TYPICAL REVERSE CHARACTERISTICS
 PER BRIDGE ELEMENT

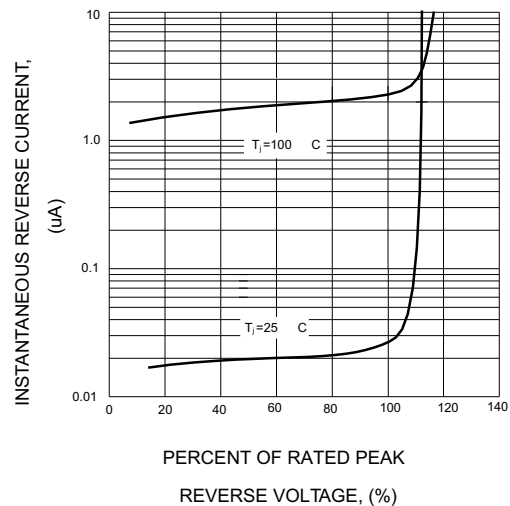
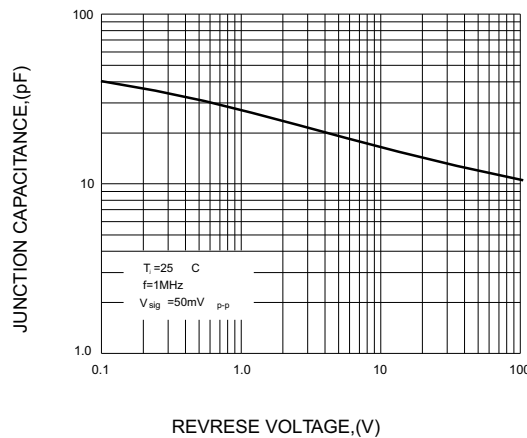


FIG.5-TYPICAL JUNCTION CAPACITANCE
 PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.