

KBP2005 THRU KBP210

2.0 Ampere

50 to 1000 Volts

FEATURES

- · Low cost
- · High forward surge current capability
- · Ideal for printed circult board
- High temperature soldering guaranteed:
 260°C/10 second, 0.375" (9.5mm) lead length

at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

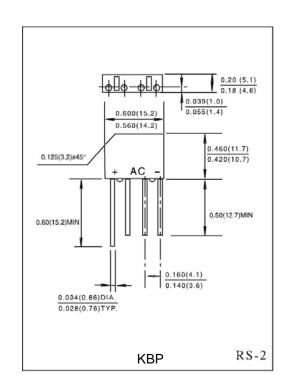
· Case: Transfer molded plastic

 Terminal: Lead solderable per MIL - STD - 202E method 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	KBP 2005	KBP 201	KBP 202	KBP 204	KBP 206	KBP 208	KBP 210	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 $T_A = 50^{\circ}C$ (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<8.3ms)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 1.0A	V_{F}	1.0							Volts
Maximum DC Reverse Current at rate $T_A = 25^{\circ}C$	т	10							μ A
DC blocking voltage per element $T_A = 100^{\circ}C$	I_R	0.5							mA
Typical Junction Capacitance (Note 1)	\mathbf{C}_{j}	20							pF
Typical Thermal Resistance (Note 2)	$R_{ heta JA}$	28							°C/W
Operating Temperature Range	T_{J}	(-65 to +150)							°C
Storage Temperature Range	T_{STG}	(-65 to +150)							

NOTES:

- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
- $2.\ Unit\ mounted\ on\ P.C.\ board\ with\ 0.47"\ X\ 0.47"\ (12\ X12\ mm)\ copper\ pads,.\ 375"\ (9.5mm)\ lead\ length.$



RATINGS AND CHARACTERISTIC CURVES

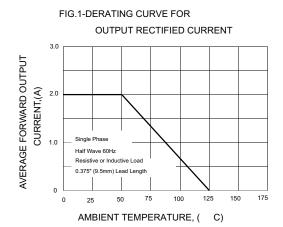


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

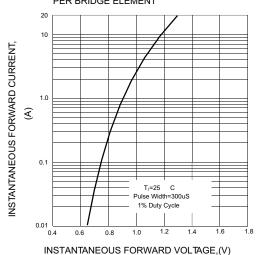
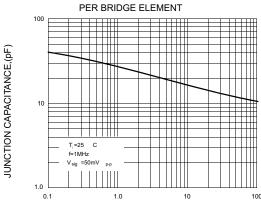


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



REVRESE VOLTAGE,(V)

FIG.2-MAXIMUM NON-REPETITIVE PEAK

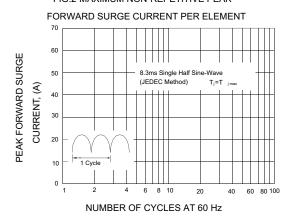
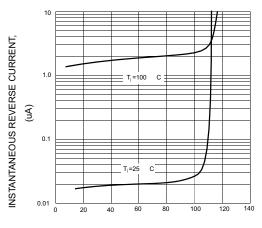


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



PERCENT OF RATED PEAK
REVERSE VOLTAGE, (%)