

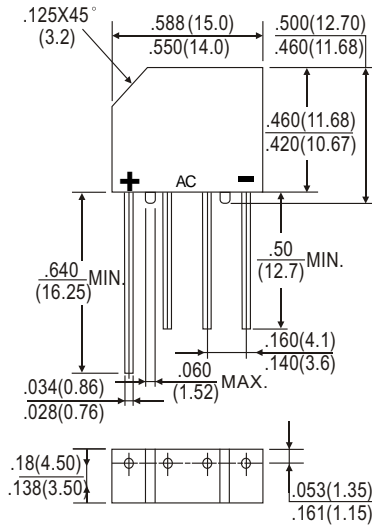
KBP2005 THRU KBP210

SINGLE PHASE 2.A MPS.GLASS PASSIVATED BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts



KBP



Dimensions in inches and (millimeters)

FEATURES

- * High case dielectric strength
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board

MECHANICAL DATA

- * Case : Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 3.4 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.

	SYM	KBP	KBP	KBP	KBP	KBP	KBP	KBP	units
	BOL	2005	201	202	204	206	208	210	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward rectified Output Current at $T_A=50^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	60							A
Maximum Forward Voltage Drop per element at 2.0A DC	V_F	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 500.0							μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	14.9							A^2Sec
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	2.2							$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-55 to +150							$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to +150							$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Case Mounted on P.C.B with $0.47 \times 0.47''$ ($12 \times 12\text{mm}$) Copper Pads.



RATING AND CHARACTERISTIC CURVES KBP200 - KBP210

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

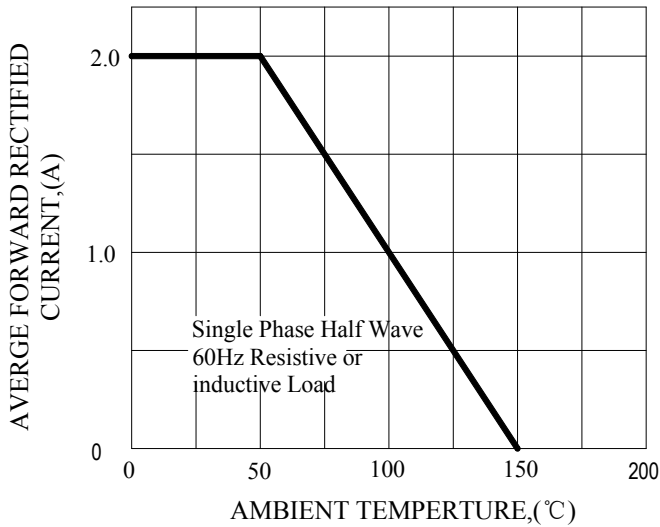


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

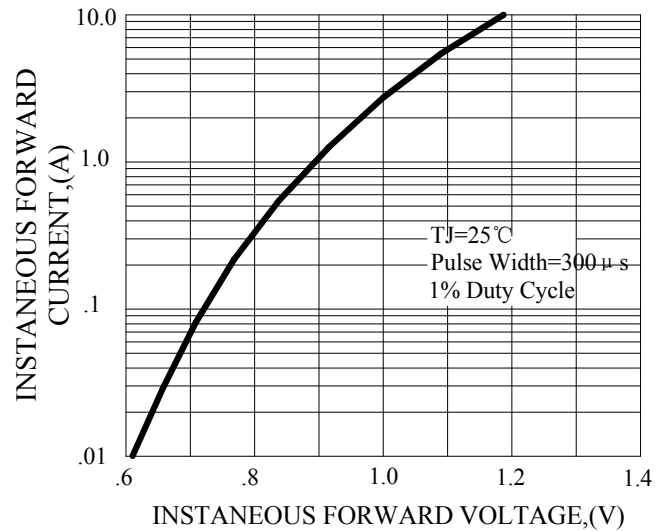


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

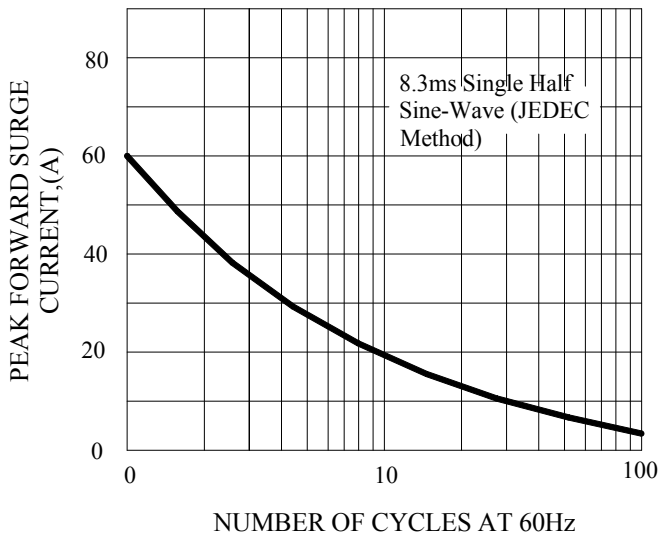


FIG.4-TYPICAL REVERSE CHARACTERISTICS

