

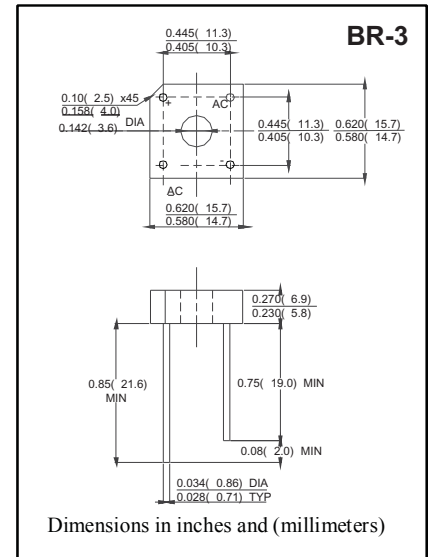
SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES

- Glass assivated Chip
- High forward surge current capability
- Ideal for printed circuit board
- High isolation voltage from case to leads
- 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 molded on case
- Mounting: Thru hole for #6 screw, 5 in.-lbs torque max.
- Weight: 0.093ounce, 2.62 grams



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 BR305	KBPC101 BR31	KBPC102 BR32	KBPC104 BR34	KBPC106 BR36	KBPC108 BR38	KBPC110 BR310	UNITS	
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	$I_{(AV)}$	$T_C=50^\circ\text{C}$ (Note 2)						3.0		Amps
		$T_A=25^\circ\text{C}$ (Note 2)						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 at 5.0A	V_F					1.1				Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	I_R	$T_A=25^\circ\text{C}$				5				μAmps
		$T_A=100^\circ\text{C}$				0.5				mAmps
Isolation Voltage from case to leads	V_{ISO}					2500				μAmps
Typical Junction Capacitance Resistance (Note 1)	C_J					20				$^\circ\text{C}/\text{W}$
Typical Thermal Resistance per element (Note 2)	$R_{\theta JA}$					12				$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J					-55 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}					-55 to +150				$^\circ\text{C}$

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Unit mounted on 4.0"×4.0"×0.11" thick (10.5×10.5×0.3mm) Al. plate.
3. Unit mounted on P.C.B at 0.375" (9.5mm) lead length with 0.5"×0.5" (12×12mm) copper pads.

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RATING AND CHARACTERISTIC CURVES **KBPC1005 - KBPC110**
BR305 - BR310

FIG.1- DERATING CURVE FOR
 OUTPUT DERTAINING CURVE

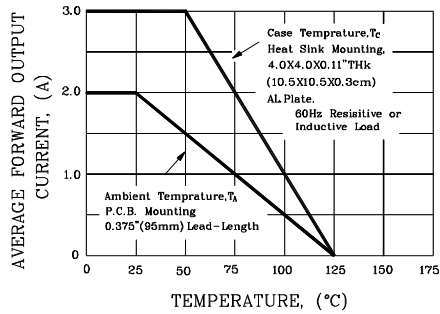


FIG.2- MAXIMUM NON-REPETITIVE PEAK
 FORWARD SURGE CURRENT PER ELEMENT

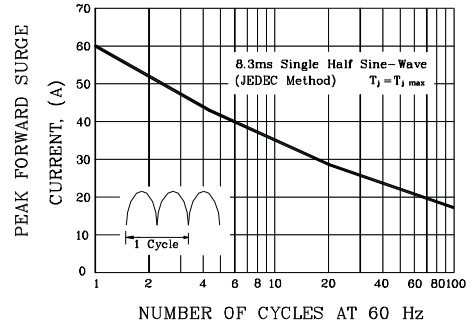


FIG.3- TYPICAL FORWARD CHARACTERISTICS
 PER BRIDGE ELEMENT

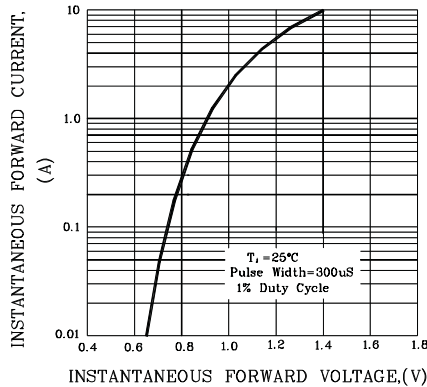


FIG.4- TYPICAL REVERSE CHARACTERISTICS
 PER BRIDGE ELEMENT

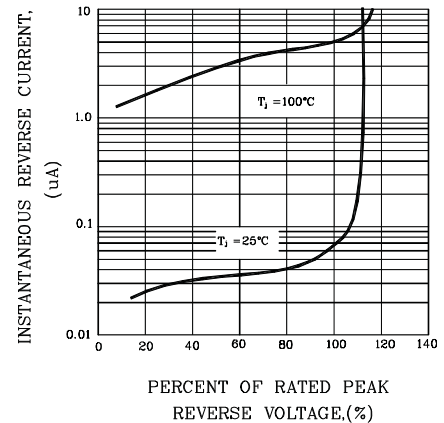
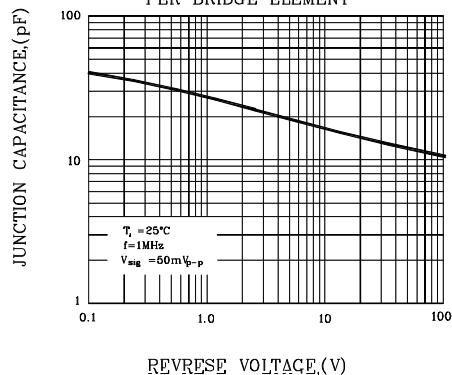


FIG.5- TYPICAL JUNCTION CAPACITANCE
 PER BRIDGE ELEMENT



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.