

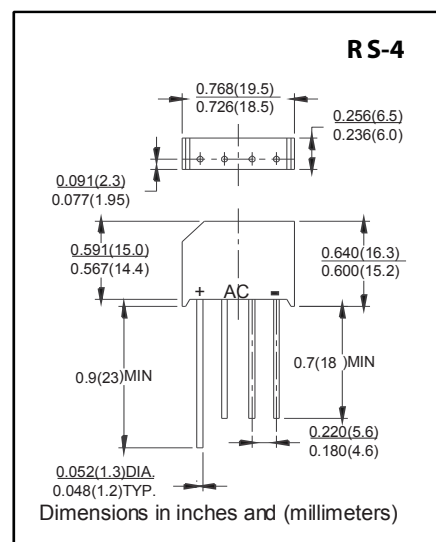
## SINGLE PHASE BRIDGE RECTIFIER

### FEATURES

- Glass Passivated Chip Junction
- 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 208C
- Mounting Position: Any
- Weight: 0.22ounce, 6.21gram



### 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	KBL005	KBL01	KBL02	KBL04	KBL06	KBL08	KBL10	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 $T_C=40^{\circ}C$ (Note 2)	$I_{(AV)}$	4.0							Amps
$T_A=50^{\circ}C$ (Note 3)									
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							Amps
Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	93							$A^2s$
Maximum Instantaneous Forward Voltage Drop per bridge element at 4.0A	$V_F$	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$I_R$	5							$\mu A$ mps
		1.0							mAmps
Typical Junction Capacitance (Note 1)	$C_J$	110							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	13							$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^{\circ}C$

### NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 3.0"x3.0"x0.11" thick (7.5x7.5x0.3 cm) Al. plate.
3. P.C. Board mount with 0.5"x0.5" (12x12cm) copper pads 0.375" (9.5mm) lead length

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### RATING AND CHARACTERISTIC CURVES KBL005 - KBL10

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

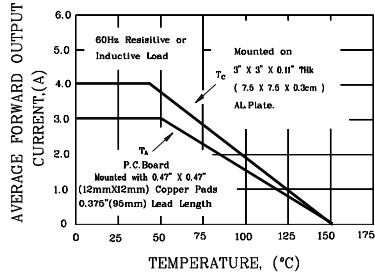


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENT

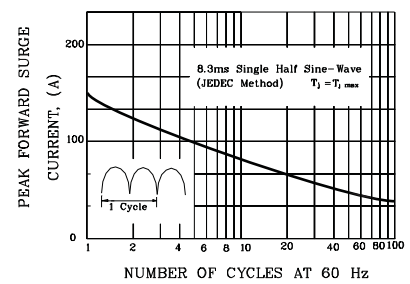


FIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENT

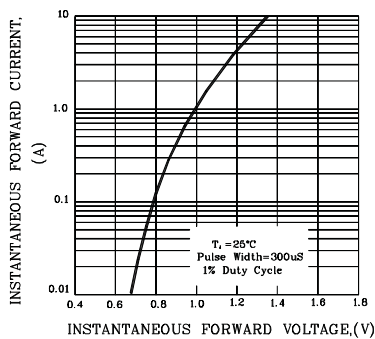


FIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENT

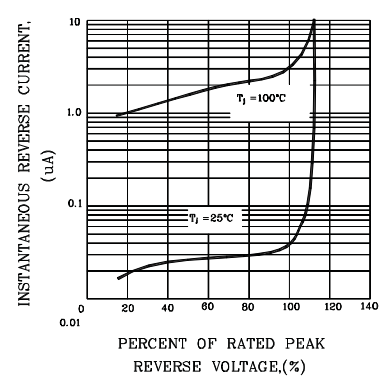
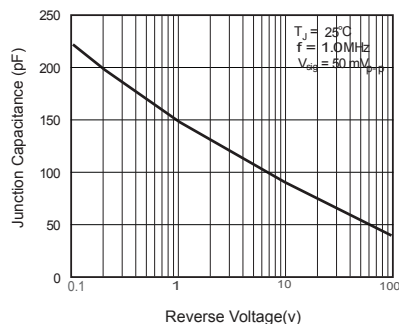


FIG.5. Typical Junction Capacitance per  
Diode



#### Disclaimer

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