

# KBL005 ...KBL10

## 4.0A SINGLE - PHASE SILICON BRIDGE

### Features

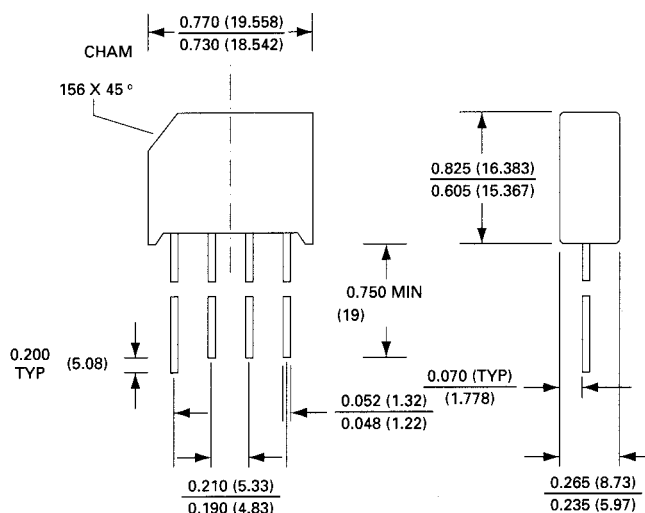
- Ideal for printed circuit board
- Surge overload rating - 200 amperes peak
- Mounting Position: Any
- Leads: Silver-plated copper
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0.
- U/L recognized file # 142814

### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

4.0 Amperes



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

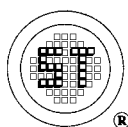
Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	KBL005	KBL01	KBL02	KBL04	KBL06	KBL08	KBL10	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current at 50 °C T <sub>A</sub> (Note 1)	4.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load	200							A
Maximum Forward Voltage Drop per Bridge Element at 3A Peak	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	10							μA
Maximum Reverse Current at Rated DC Blocking Voltage and 150° T <sub>A</sub>	1.0							mA
Operating and storage temperature Range, T <sub>A</sub>	-55 to + 150							°C

**NOTES:** (1) Mounting conditions. 0.5" lead length maximum.



**SEMTECH ELECTRONICS LTD.**

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RATING AND CHARACTERISTICS CURVES  
KBL005 SERIES

FIG. 1-MAXIMUM FORWARD SURGE CURRENT

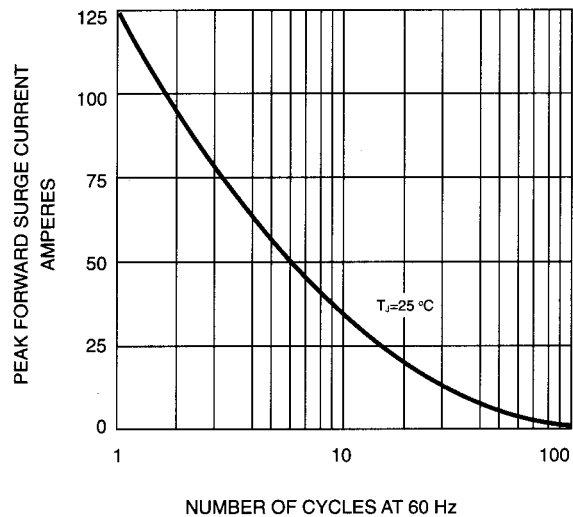


FIG. 2-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

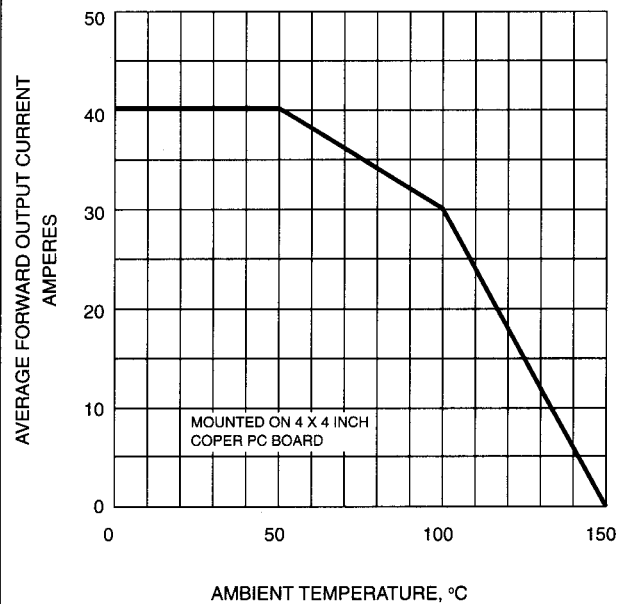


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

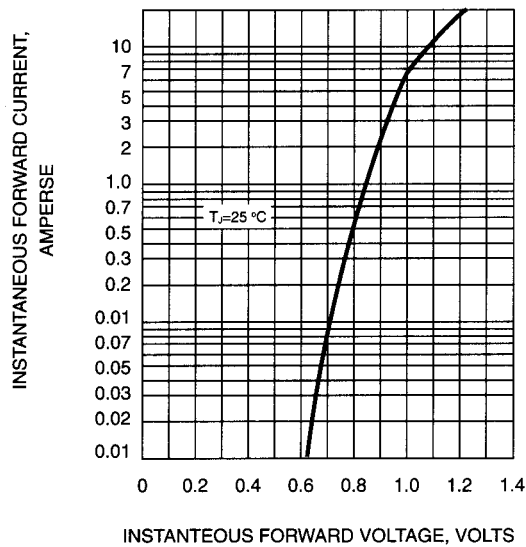


FIG. 4-TYPICAL REVERSE  
CHARACTERISTICS (25  $^\circ\text{C}$ )

