



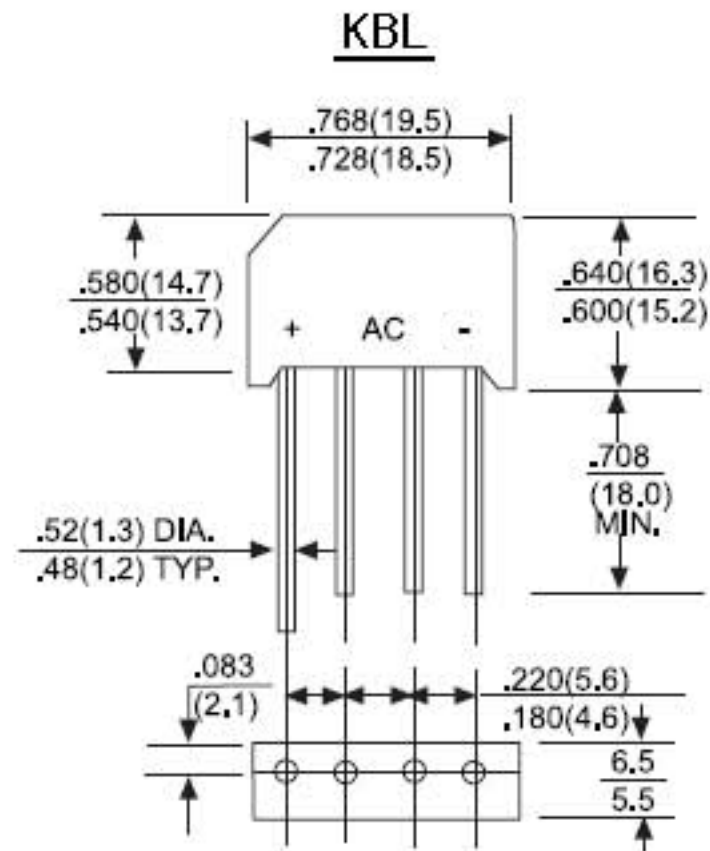
# KBL4/RS4L/KBL6 SERIES

**SINGLE PHASE 4.0/6.0 AMPS.  
SILICON BRIDGE  
RECTIFIERS**

**Voltage Range  
50 to 1000 Volts  
Current  
4.0/6.0 Amperes**

## FEATURES

- UL Recognized File # E-230084
- Surge overload rating - 200 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Mounting Position: Any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 50Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

| Type Number   |   | KBL6005     | KBL601 | KBL602 | KBL604 | KBL606 | KBL608 | KBL610 | UNITS |
|---|---|-------------|--------|--------|--------|--------|--------|--------|-------|
|   |   | RS401L      | RS402L | RS403L | RS404L | RS405L | RS406L | RS407L |       |
|   |   | KBL4005     | KBL401 | KBL402 | KBL404 | KBL406 | KBL408 | KBL410 |       |
| Maximum Repetitive Peak Reverse Voltage   | V <sub>RRM</sub>  | 50          | 100    | 200    | 400    | 600    | 800    | 1000   | V     |
| Maximum RMS Bridge Voltage  | V <sub>RMS</sub>  | 35          | 70     | 140    | 280    | 420    | 560    | 700    | V     |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>   | 50          | 100    | 200    | 400    | 600    | 800    | 1000   | V     |
| Maximum Average Forward Current @ T <sub>A</sub> =50°C T <sub>A</sub> (Note 1)      | KBL4<br>KBL6<br>I <sub>F(AV)</sub>                              | 4.0<br>6.0  |        |        |        |        |        |        | A     |
| Peak Forward Surge Current, 8.3ms single half sine-wave super imposed on rated load | KBL4<br>KBL6<br>I <sub>FSM</sub>                                | 150<br>200  |        |        |        |        |        |        | A     |
| Maximum DC Reverse Voltage Drop Per Leg   | KBL4@4.0A<br>KBL6@6.0A<br>V <sub>F</sub>                        | 1.1<br>1.1  |        |        |        |        |        |        | V     |
| Maximum Reverse Current at Rated DC Blocking Voltage                                | T <sub>A</sub> =25°C<br>T <sub>A</sub> =100°C<br>I <sub>R</sub> | 5<br>100    |        |        |        |        |        |        | uA    |
| Operating and Storage Temperature Range T <sub>A</sub>                              | T <sub>J</sub> , T <sub>STG</sub>                               | -55 to +150 |        |        |        |        |        |        | °C    |

NOTES: 1. Mounting conditions, 0.5" lead length maximum.

RATING AND CHARACTERISTIC CURVES  
KBL4/RS4L/KBL6 SERIES



FIG.1 - MAXIMUM FORWARD SURGE CURRENT

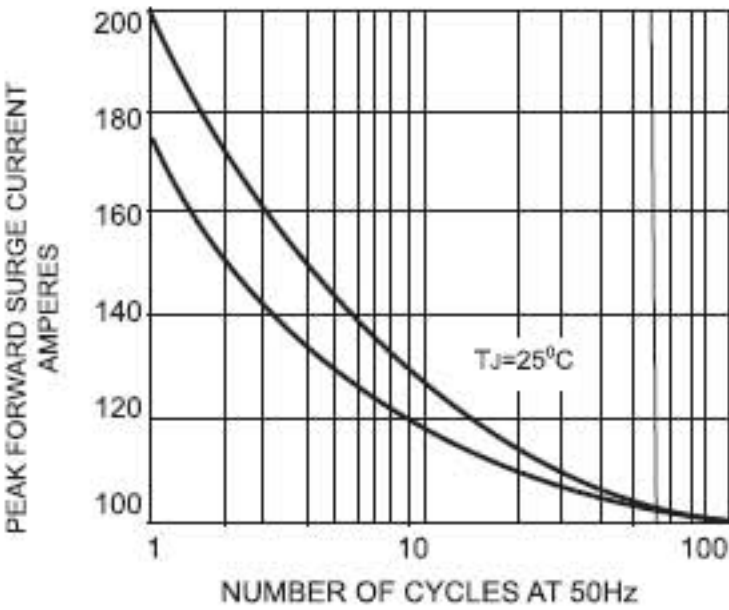


FIG.2 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT

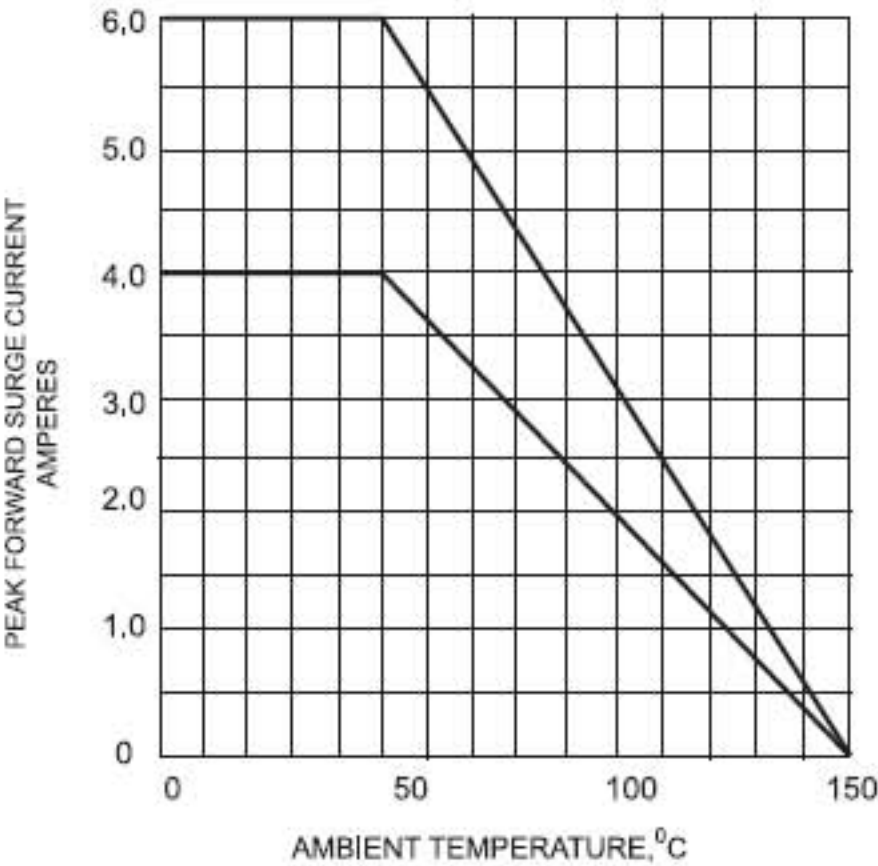


FIG.3 - TYPICAL FORWARD  
CHARACTERISTICS

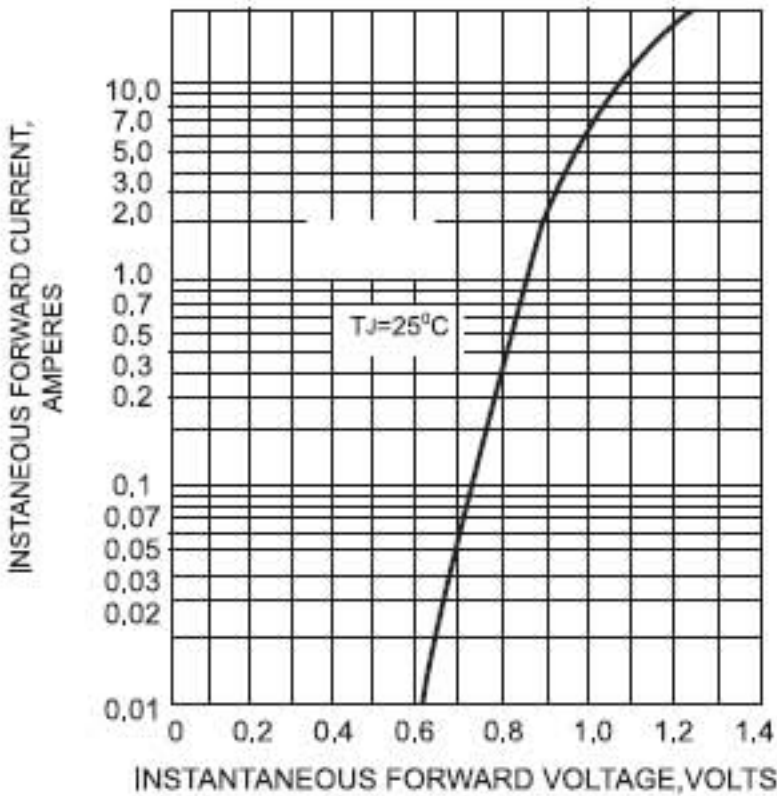


FIG.4 - TYPICAL REVERSE  
CHARACTERISTICS

