



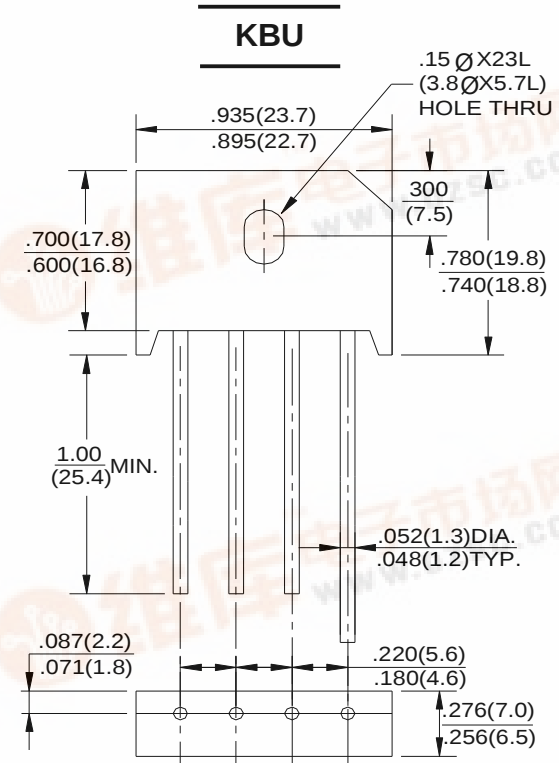
# KBU10/15/25/35 SERIES

## SILICON BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts  
FORWARD CURRENT - 10/15/25/35 Amperes

### FEATURES

- Surge overload rating -240~400 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position: Any



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%

| CHARACTERISTICS                                                                                          | SYMBOL | KBU<br>10005<br>15005<br>25005<br>35005 | KBU<br>1001<br>1501<br>2501<br>3501 | KBU<br>1002<br>1502<br>2502<br>3502 | KBU<br>1004<br>1504<br>2504<br>3504 | KBU<br>1006<br>1506<br>2506<br>3506 | KBU<br>1008<br>1508<br>2508<br>3508 | KBU<br>1010<br>1510<br>2510<br>3510 | UNIT |
|----------------------------------------------------------------------------------------------------------|--------|-----------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|------|
| Maximum Recurrent Peak Reverse Voltage                                                                   | VRRM   | 50                                      | 100                                 | 200                                 | 400                                 | 600                                 | 800                                 | 1000                                | V    |
| Maximum RMS Voltage                                                                                      | VRMS   | 30                                      | 70                                  | 140                                 | 280                                 | 420                                 | 560                                 | 700                                 | V    |
| Maximum DC Blocking Voltage                                                                              | VDC    | 50                                      | 100                                 | 200                                 | 400                                 | 600                                 | 800                                 | 1000                                | V    |
| Maximum Average Forward (with heatsink Note 2)<br>Rectified Current @ Tc=100℃ (without heatsink)         | I(AV)  | KBU<br>10                               | 10<br>3.0                           | KBU<br>15                           | 15<br>3.2                           | KBU<br>25                           | 25<br>3.6                           | KBU<br>35                           | A    |
| Peak Forward Surage Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method) | IFSM   |                                         | 240                                 |                                     | 300                                 |                                     | 400                                 |                                     | A    |
| Maximum Forward Voltage at 5.0/7.5/12.5/17.5A DC                                                         | VF     |                                         | 1.0                                 |                                     | 1.1                                 |                                     |                                     |                                     | V    |
| Maximum DC Reverse Current @ Tj=25℃<br>at Rated DC Blocking Voltage @ Tj=125℃                            | IR     | 10<br>500                               |                                     |                                     |                                     |                                     |                                     |                                     | uA   |
| Operating Temperature Range                                                                              | TJ     | -55 to+125                              |                                     |                                     |                                     |                                     |                                     |                                     | ℃    |
| Storage Temperature Range                                                                                | TSTG   | -55 to+125                              |                                     |                                     |                                     |                                     |                                     |                                     | ℃    |

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 100mm\*100mm\*1.6mm cu plate heatsink.



RATING AND CHARACTERISTIC CURVES  
KBU 10/15/25/35A SERIES



FIG. 1 – MAXIMUM FORWARD SURGE CURRENT

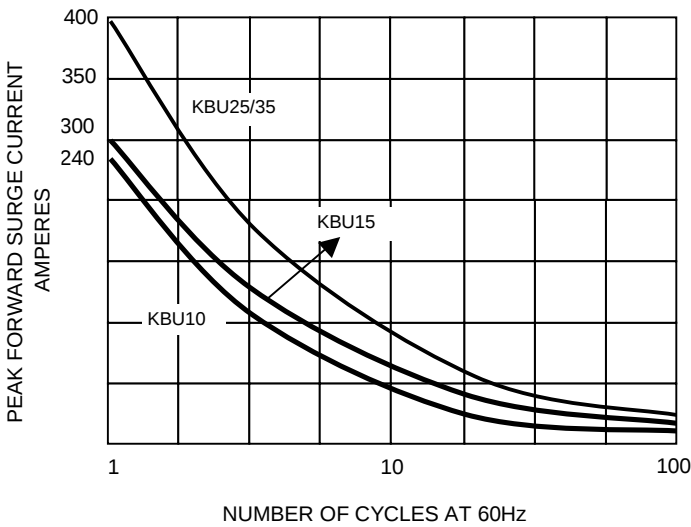


FIG. 2 – DERATING CURVE OUTPUT RECTIFIED CURRENT

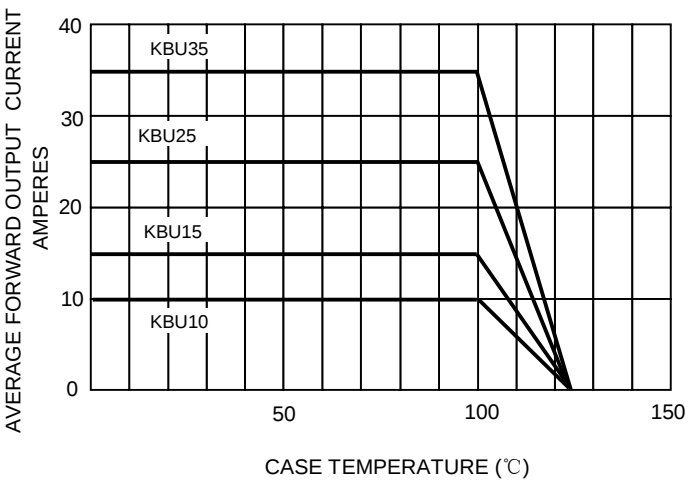


FIG.3– TYPICAL FORWARD CHARACTERISTICS

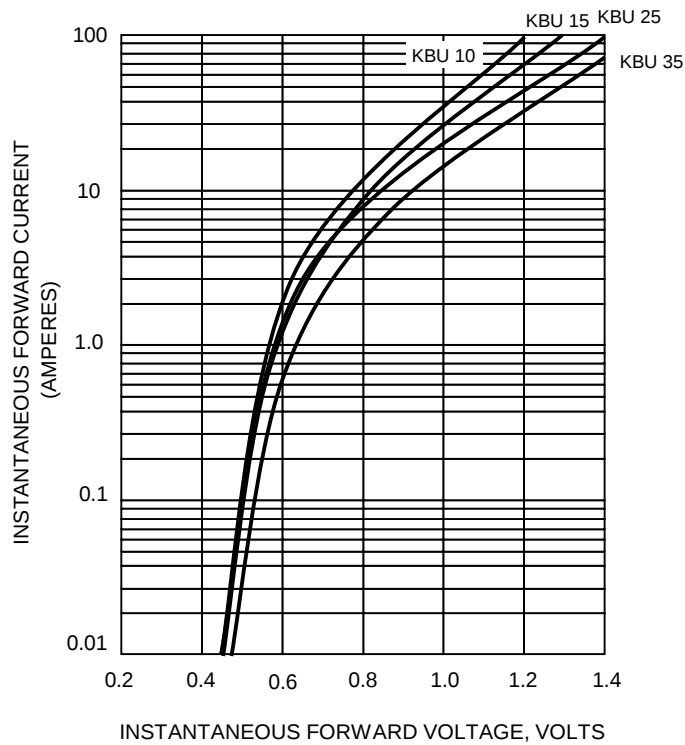


FIG.4– TYPICAL REVERSE CHARACTERISTICS

