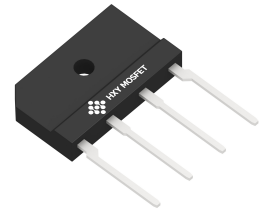




Features

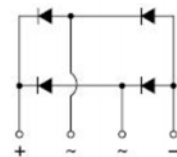
- This series is UL listed under the Recognized Component Index, file number E142814
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS
Ideal for printed circuit boards
- High surge current capability



KBJ

Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------------|-----------|---------|----------|
| KBJ1510_B0_10001 | KBJ(4KBJ) | KBJ1510 | 250 |



Maximum Ratings (Ta=25°C unless otherwise noted)

| Parameter | Symbol | KBJ 15005 | KBJ 1501 | KBJ 1502 | KBJ 1504 | KBJ 1506 | KBJ 1508 | KBJ 1510 | Unit |
|---|------------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified output current Tc = 100°C TA = 25°C | IF(AV) | 15.0 (1) 7.5(2) | | | | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM | 170 | | | | | | | A |
| Rating for fusing (t<8.3ms) | I ² t | 120 | | | | | | | A ² sec |
| Maximum thermal resistance per leg | RejA RejC | 2.6(2) 5 (1) | | | | | | | °C/W |
| Operating junction and storage temperature range | TJ, TSTG | -55 to + 150 | | | | | | | °C |

Electrical Characteristics (Ta=25°C unless otherwise specified)

| Parameter | Symbol | KBJ 15005 | KBJ 1501 | KBJ 1502 | KBJ 1504 | KBJ 1506 | KBJ 1508 | KBJ 1510 | Unit |
|--|--------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| Maximum instantaneous forward voltage drop per leg at 4.0A | VF | 1.05 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage per leg TA = 25°C TA = 125°C | IR | 10 500 | | | | | | | μA |

Notes: (1)Unit case mounted on Al plate heatsink.

(2)Units mounted on P.C.B. with 0.5x0.5"(12x12mm) copper pads and 0.375"(9.5) lead length.

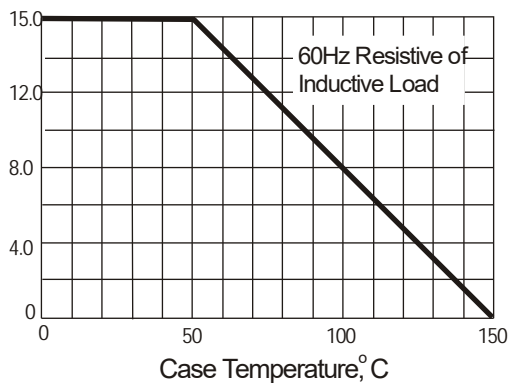
(3)Recommended mounting position is to bolt down on heat sink with silicone thermal compound for maximum heat transfer with #6 screw.



Typical Characteristics

Average Forward Output Current, Amperes

Fig. 1 Derating Curve for Output Rectified Current



Peak Forward Surge Current, Amperes

Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

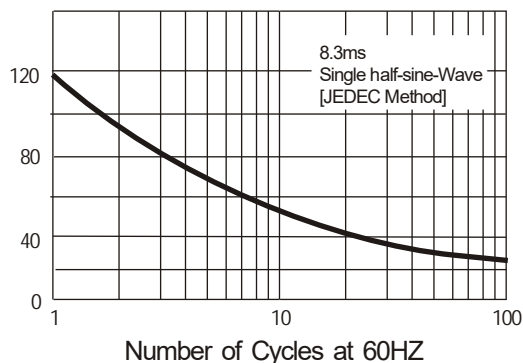


Fig. 3 Typical Instantaneous Forward Characteristics

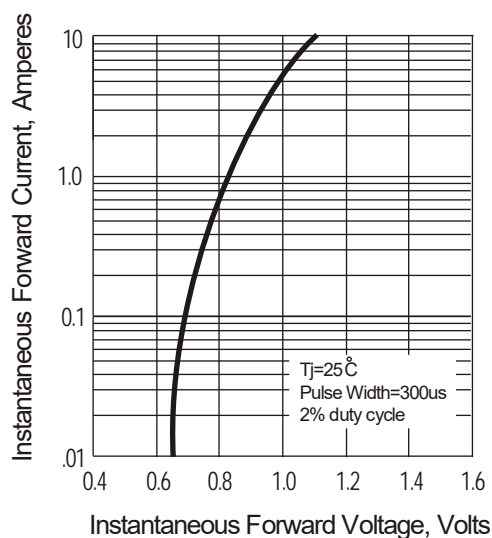


Fig. 4 Typical Reverse Characteristics at $T_J = 25^\circ\text{C}$

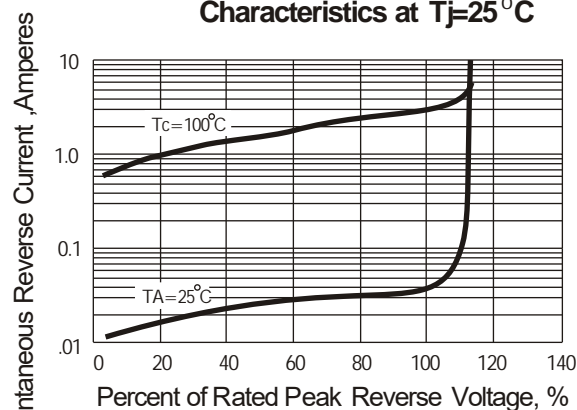
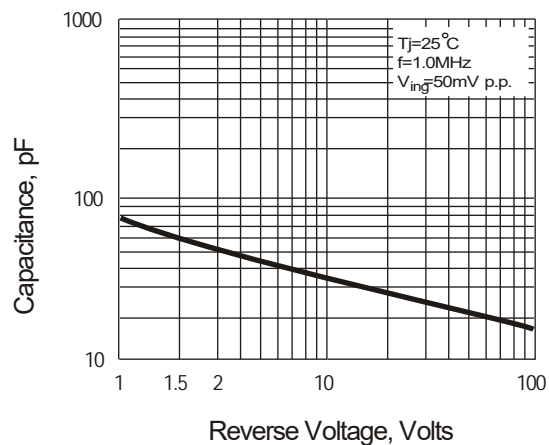
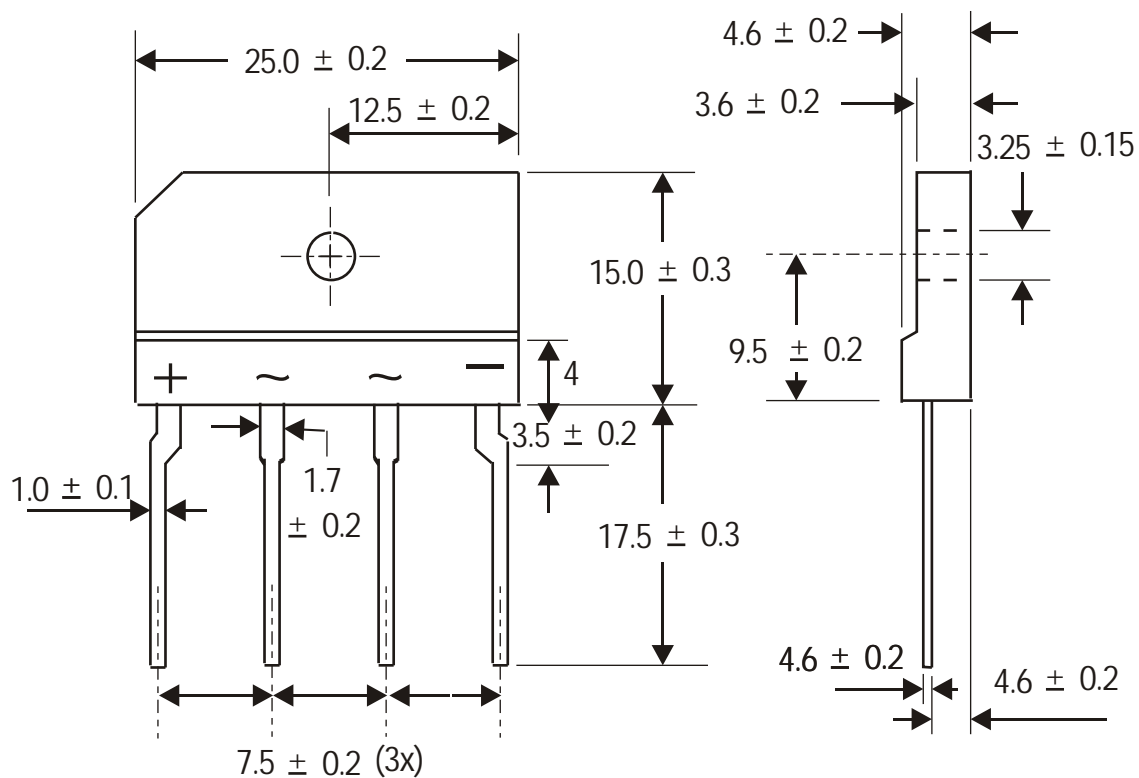


Fig. 5 Typical Junction Capacitance





Package Information
KBJ(4KBJ)



Dimensions in millimeters(1mm=0.0394")



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