

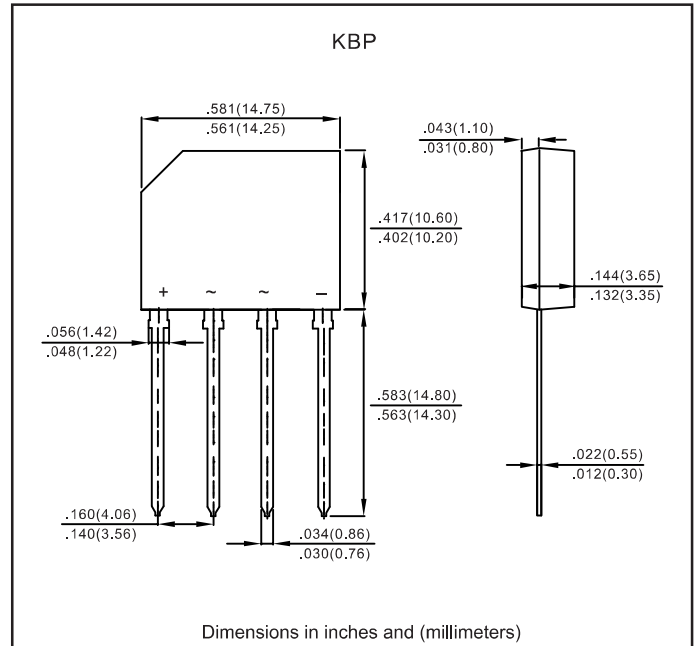
Features

- Surge overload ratings to 60 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction technique
- Lead-free parts for green partner, meet RoHS requirements
- UL recognized file # E321971.
- Suffix "-H" indicates Halogen free parts, ex. KBP2005 -H.

Mechanical data

- Case: Potted plastic round body KBP
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: As marked
- Mounting Position: Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

| PARAMETER | CONDITIONS | Symbol | MIN. | TYP. | MAX. | UNIT |
|---------------------------|---|-----------|------|------|------|----------------------|
| Forward rectified current | See Fig.1 | I_O | | | 2.0 | A |
| Forward surge current | 8.3ms single half sine-wave (JEDEC methode) | I_{FSM} | | | 60 | A |
| Reverse current | $V_R = V_{RRM} T_J = 25^\circ\text{C}$ | I_R | | | 5.0 | uA |
| | $V_R = V_{RRM} T_J = 125^\circ\text{C}$ | | | | 500 | |
| I^2t Rating for fusing | $t < 8.3$ ms | I^2t | | | 15 | A^2s |
| Storage temperature | | T_{STG} | -65 | | +175 | $^\circ\text{C}$ |

| SYMBOLS | V_{RRM}^{*1} (V) | V_{RMS}^{*2} (V) | V_R^{*3} (V) | V_F^{*4} (V) | Operating temperature T_J ($^\circ\text{C}$) |
|---------|-----------------------|-----------------------|-------------------|-------------------|---|
| KBP2005 | 50 | 35 | 50 | 1.10 | -55 to +150 |
| KBP201 | 100 | 70 | 100 | | |
| KBP202 | 200 | 140 | 200 | | |
| KBP204 | 400 | 280 | 400 | | |
| KBP206 | 600 | 420 | 600 | | |
| KBP208 | 800 | 560 | 800 | | |
| KBP210 | 1000 | 700 | 1000 | | |

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage @ $I_F=2.0\text{A}$

Rating and characteristic curves (KBP2005 THRU KBP210)

FIG.1-DERATING CURVE
OUTPUT RECTIFIED CURRENT

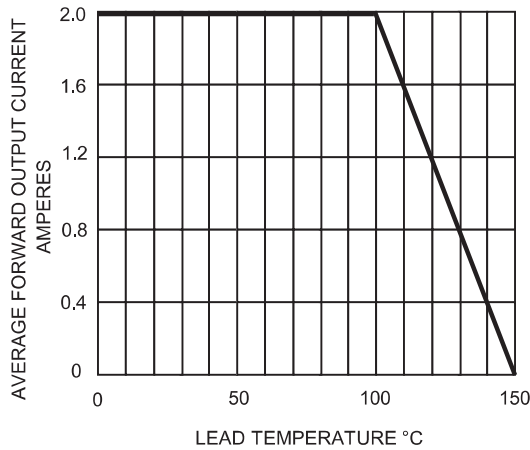


FIG.2-TYPICAL FORWARD CHARACTERISTICS

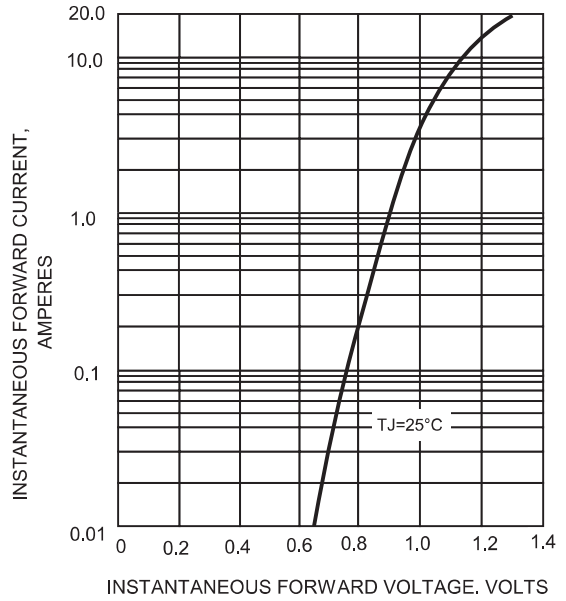


FIG.3-TYPICAL REVERSE CHARACTERISTICS

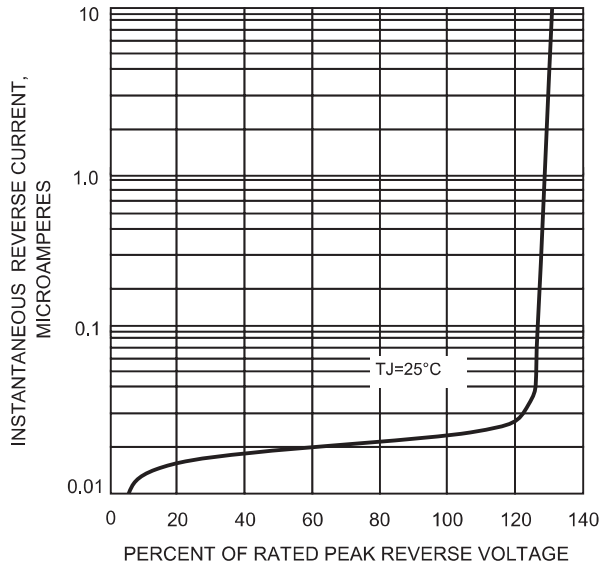
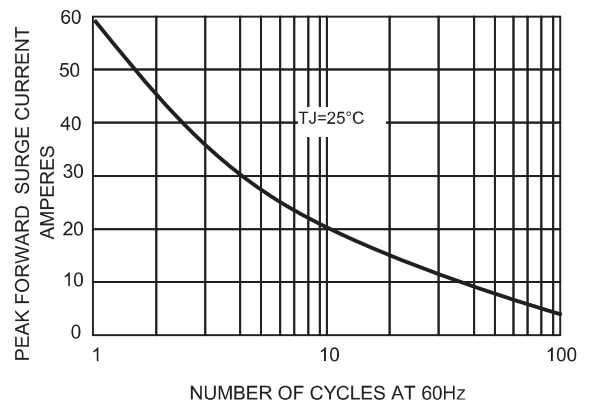
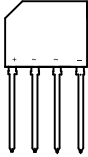
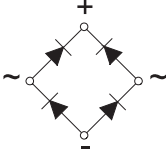


FIG.4-MAXIMUM FORWARD SURGE CURRENT



Pinning information

| Simplified outline | Symbol |
|---|---|
|  |  |

Marking

| Type number | Marking code |
|-------------|--------------|
| KBP2005 | KBP2005 |
| KBP201 | KBP201 |
| KBP202 | KBP202 |
| KBP204 | KBP204 |
| KBP206 | KBP206 |
| KBP208 | KBP208 |
| KBP210 | KBP210 |

Tube packing

| PACKAGE | TUBE (pcs) | TUBE SIZE (m/m) | BOX (pcs) | INNER BOX (m/m) | CARTON SIZE (m/m) | CARTON (pcs) | APPROX. GROSS WEIGHT (kg) |
|---------|------------|-----------------|-----------|-----------------|-------------------|--------------|---------------------------|
| KBP | 30 | 470*37.4*7.4 | 1,200 | 490*145*85 | 505*325*195 | 4,800 | 9.2 |

Bulk packing

| PACKAGE | BOX (pcs) | INNER BOX (m/m) | CARTON SIZE (m/m) | CARTON (pcs) | APPROX. GROSS WEIGHT (kg) |
|---------|-----------|-----------------|-------------------|--------------|---------------------------|
| KBP | 500 | 180*180*35 | 390*190*200 | 5,000 | 11.4 |