

KBPC35005N thru KBPC3510N BR3505 thru BR3510



SINGLE PHASE SILICON BRIDGE

FORWARD CURRENT: 35.0 Ampere
REVERSE VOLTAGE: 50 to 1000 Volts

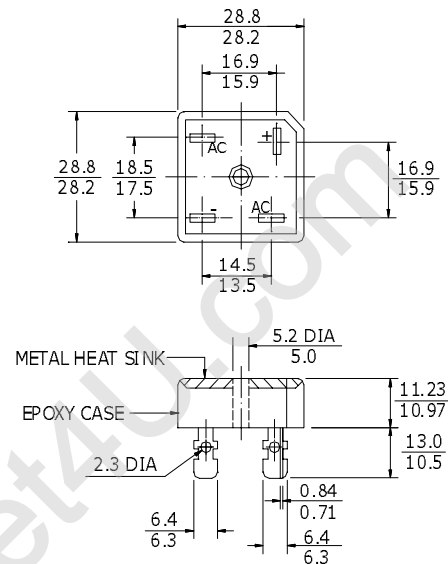
FEATURES

- Material used carries UL recognized
- Surge overload rating 400 ampere peak
- Low forward voltage drop
- Electrically isolated base 2000 volts

MECHANICAL DATA

- Solderable .25"(6.35mm) FASTON terminals
- Polarity: Polarity symbols marked on case
- Mounting: Through hole for #10 screw, 20in.-1bs. torque max.
- Weight: 0.66 ounce, 18.7 grams (BR35)
0.55 ounce, 15.6 grams (KBPC35N)

BR-35



Dimensions in Millimeters

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise noted.

Resistive or inductive load 60Hz.

For capacitive load, derate current by 20%.

| CHARACTERISTICS | Symbol | KBPC | KBPC | KBPC | KBPC | KBPC | KBPC | KBPC | Units |
|---|-----------------|-------------|-------|-------|-------|-------|-------|-------|---------------------------|
| | | 35005N | 3501N | 3502N | 3504N | 3506N | 3508N | 3510N | |
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Input Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Output Current @ $T_c=55^\circ\text{C}$ | $I_{(AV)}$ | 35 | | | | | | | A |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDED Method) | I_{FSM} | 400 | | | | | | | A |
| Maximum DC Forward Voltage per bridge element at 17.5A DC | V_F | 1.2 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$ per bridge element | I_R | 10 1 | | | | | | | uA mA |
| I^2t Rating for fusing ($t < 8.3\text{ms}$) | I^2t | 664 | | | | | | | A^2S |
| Typical Thermal Resistance (Note 1) | $R_{\theta JC}$ | 2.5 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range | T_J | -55 to +125 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

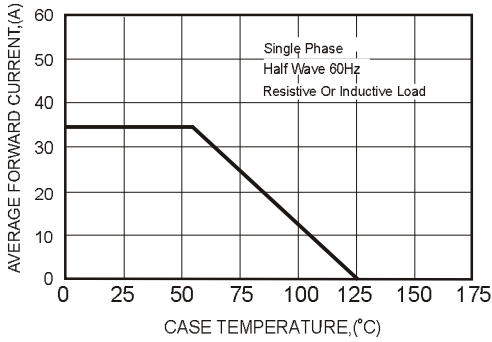


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

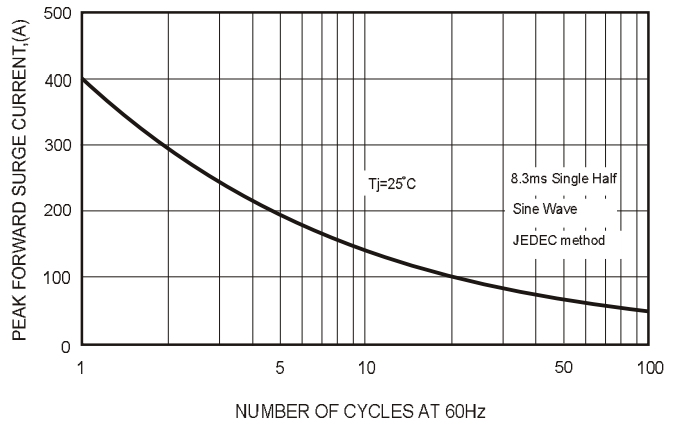


FIG.3-TYPICAL FORWARD CHARACTERISTICS

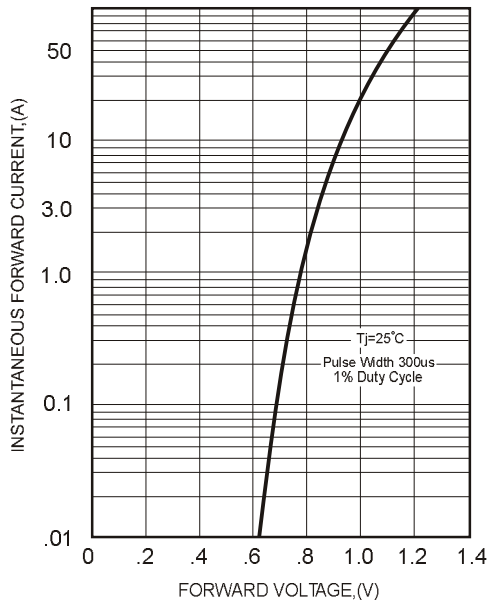


FIG.4-TYPICAL REVERSE CHARACTERISTICS

