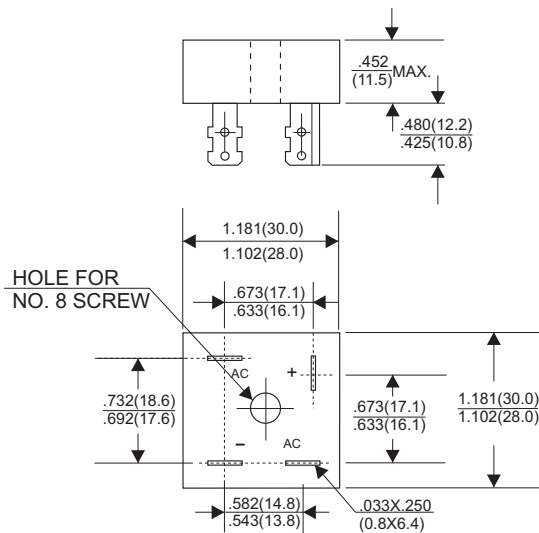




# KBPC5005 THRU KBPC5010

**SINGLE PHASE BRIDGE RECTIFIERS**  
**Reverse Voltage - 50 to 1000 Volts    Forward Current - 50.0 Ampere**

## KBPC



Dimensions in inches and (millimeters)

## FEATURES

- \*Surge overload 450 Amperes peak
- \*Low forward voltage drop
- \*Mounring Position:Any
- \*Electrically isolated base-1800 Volts
- \*Solderable 0.25"FASTON terminail

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unieess otherwies specified.  
 Single phase half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

| TYPE NUMBER   | KBPC<br>50005 | KBPC<br>5001 | KBPC<br>5002 | KBPC<br>5004 | KBPC<br>5006 | KBPC<br>5008 | KBPC<br>5010 | UNITS      |    |
|---|---------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|----|
| Maximum Recurrent Peak Reverse Voltage  | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | V          |    |
| Maximum RMS Voltage   | 35            | 70           | 140          | 280          | 420          | 560          | 700          | V          |    |
| Maximum DC Blocking Voltage   | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | V          |    |
| Maximum Average Forward Rectified Current<br>.375"(9.5mm) Lead Length at Ta=55°C                      |               |              |              |              |              |              |              | 50         | A  |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) |               |              |              |              |              |              |              | 400        | A  |
| Maximum Forward Voltage Drop per Bridge Element at 25AD.C.  |               |              |              |              |              |              |              | 1.1        | V  |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage  |               |              |              |              |              |              |              | 10.0       | μA |
|   |               |              |              |              |              |              |              | 500        | μA |
| Operating Temperature Range Tj  |               |              |              |              |              |              |              | -65 — +125 | °C |
| Storage Temperature Range Tstg  |               |              |              |              |              |              |              | -65 — +150 | °C |

# RATING AND CHARACTERISTIC CURVES (KBPC5005 THRU KBPC5010)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

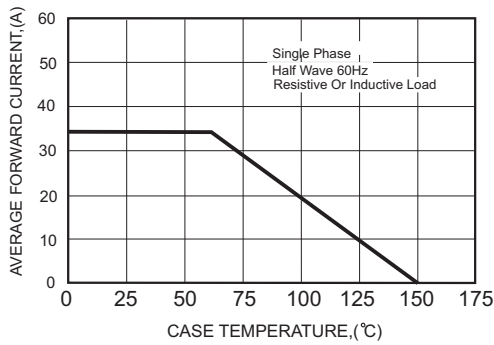


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

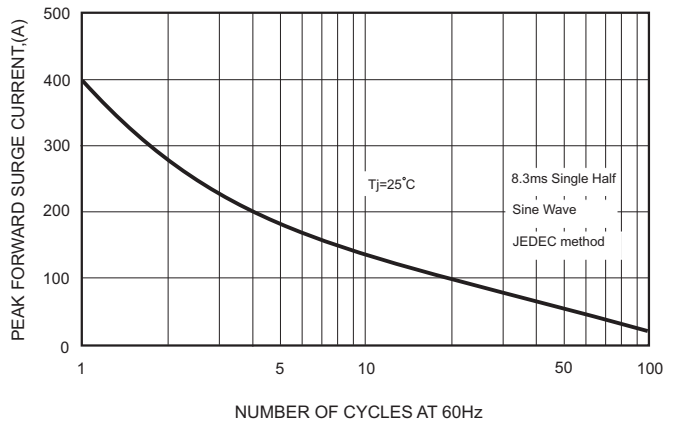


FIG.3-TYPICAL FORWARD CHARACTERISTICS

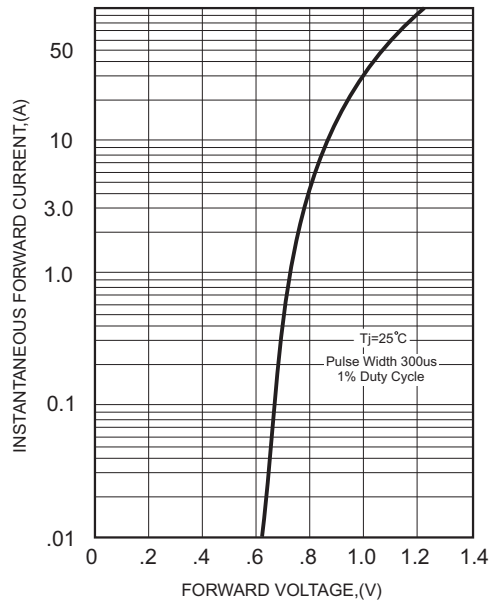


FIG.4-TYPICAL REVERSE CHARACTERISTICS

