

# KBPC50005 THRU KBPC5010

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

50 to 1000 Volts

50.0Amperes

KBPC

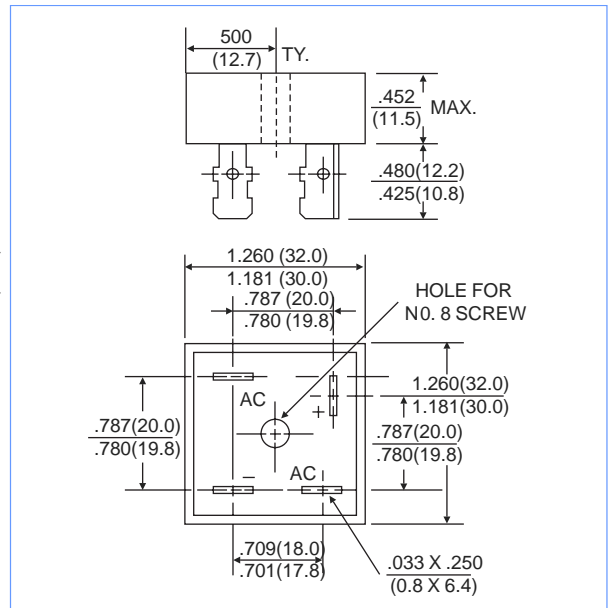
Unit : inch (mm)

### FEATURES

- \* Metal case for Maximum Heat Dissipation
- \* Surge overload ratings-400 Amperes
- \* Low forward voltage drop
- \* UL file number:E252843

### MECHANICAL DATA

Case:Molded plastic body  
 Epoxy:UL 94V-0 rate flame retardant  
 Terminals:Plated .25"(6.35mm) Fasto lugs, solderable per MIL-STD-750, Method 2026 guaranteed  
 Polarity:As marked  
 Mounting position:Any  
 Weight:30 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings & Electrical Characteristics Ratings at 25 °C ambient temperature unless otherwise specified

|   | SYMBOLS          | KBPC 50005   | KBPC 5001 | KBPC 5002 | KBPC 5004 | KBPC 5006 | KBPC 5008 | KBPC 5010 | UNITS  |
|---|------------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| 最大可重复峰值反向电压<br>Maximum recurrent peak reverse voltage                           | VRRM             | 50           | 100       | 200       | 400       | 600       | 800       | 1000      | Volts  |
| 最大均方根电压<br>Maximum rms Input voltage  | VRMS             | 35           | 70        | 140       | 280       | 420       | 560       | 700       | Volts  |
| 最大直流阻断电压<br>Maximum dc blocking voltage   | VDC              | 50           | 100       | 200       | 400       | 600       | 800       | 1000      | Volts  |
| 最大正向平均整流电流<br>Maximum average forward output rectified                          | I(AV)            | 50.0         |           |           |           |           |           |           | Amp    |
| 正向峰值浪涌电流 8.3ms 单一正弦半波<br>Peak forward surge current 8.3ms single half sine-wave | IFSM             | 500          |           |           |           |           |           |           | Amps   |
| 最大正向电压降<br>Maximum forward voltage drop per element at 15A DC                   | VF               | 1.05         |           |           |           |           |           |           | Volts  |
| 最大反向漏电流<br>Maximum reverse current  | IR               | 5.0<br>5.0   |           |           |           |           |           |           | μ Amps |
| 额定功率<br>I <sub>T</sub> rated for fusing (t>8.3ms)                               | I <sup>2</sup> T | 664          |           |           |           |           |           |           | A Sec  |
| 典型结电容<br>Typical junction capacitance (per element) (Note 1)                    | CJ               | 300          |           |           |           |           |           |           | pF     |
| 典型热电阻<br>Typical thermal resistance junction to case (per element) (Note 2)     | R <sub>θJC</sub> | 2.5          |           |           |           |           |           |           | °C/W   |
| 工作温度和存储温度<br>Operating and storage temperature range                            | TJ.TSTG          | -55 to + 125 |           |           |           |           |           |           | °C     |

### NOTES:

1. Measured at 1 Mhz and applied reverse voltage of 4.0 volts
2. Thermal Resistance from Junction to Case per leg.

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## RATING AND CHARACTERISTIC CUPUT

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

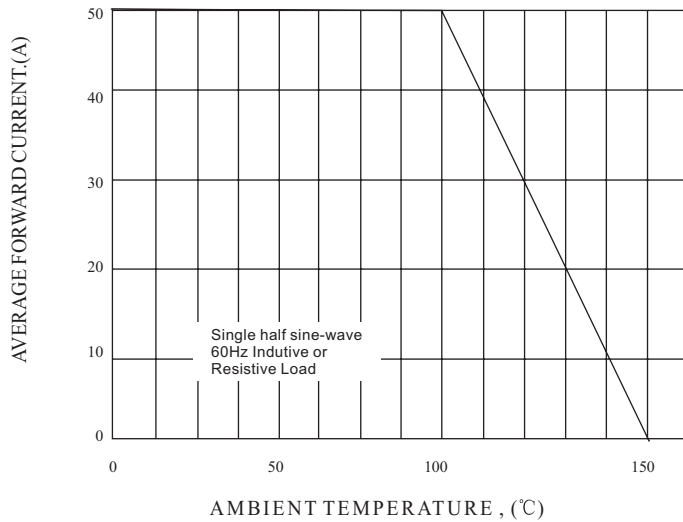


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

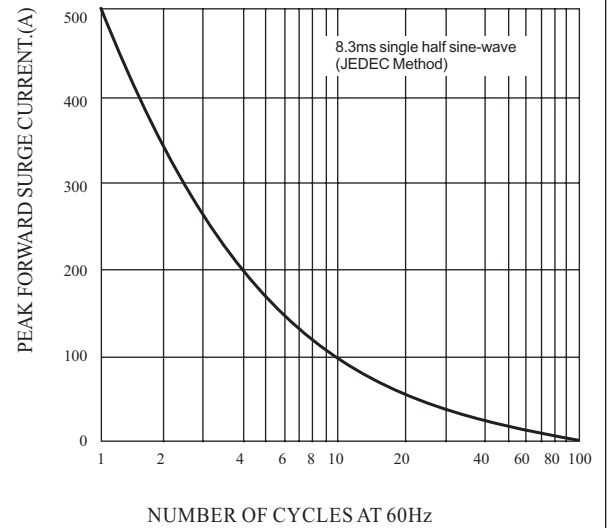


FIG. 3-TYPICAL INSTANTANEOUR FORWARD CHARACTERISTICS

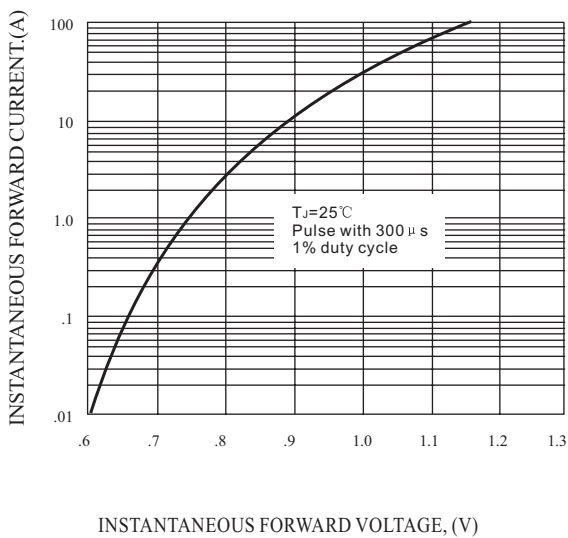


FIG.4-TYPICAL REVERSE CHARACTERISTICS

