



# CHENMKO ENTERPRISE CO.,LTD

## SINGLE-PHASE PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 6.0 Amperes

**KBPC6005PT**

**THRU**

**KBPC610PT**

Lead free devices

### FEATURES

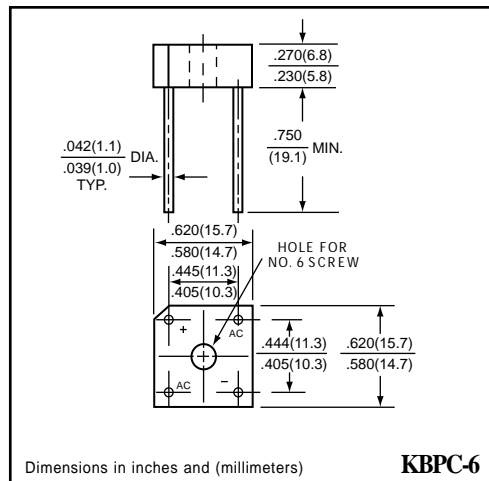
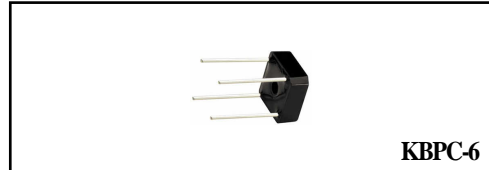
- \* Surge overload rating 125 amperes peak
- \* Low forward voltage drop
- \* Small size : simple installation
- \* Silver-plated copper leads

### MECHANICAL DATA

**Case:** JEDEC KBPC-6 molded plastic  
**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026  
**Mounting position:** Any  
**Mounting:** Hole thru for # 6 screw

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.



### MAXIMUM RATINGS ( At TA = 25°C unless otherwise noted )

| RATINGS   | SYMBOL           | KBPC6005PT  | KBPC601PT | KBPC602PT | KBPC604PT | KBPC606PT | KBPC608PT | KBPC610PT | UNITS |
|---|------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub> | 50          | 100       | 200       | 400       | 600       | 800       | 1000      | Volts |
| Maximum RMS Voltage   | V <sub>RMS</sub> | 35          | 70        | 140       | 280       | 420       | 560       | 700       | Volts |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>  | 50          | 100       | 200       | 400       | 600       | 800       | 1000      | Volts |
| Maximum Average Forward Rectified Current at T <sub>C</sub> = 75°C                                | I <sub>O</sub>   | 6.0         |           |           |           |           |           |           | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub> | 125         |           |           |           |           |           |           | Amps  |
| Operating Temperature Range   | T <sub>J</sub>   | -55 to +125 |           |           |           |           |           |           | °C    |
| Storage Temperature Range   | T <sub>STG</sub> | -55 to +150 |           |           |           |           |           |           | °C    |

### ELECTRICAL CHARACTERISTICS ( At TA = 25°C unless otherwise noted )

| CHARACTERISTICS                                   | SYMBOL         | KBPC6005PT | KBPC601PT | KBPC602PT | KBPC604PT | KBPC606PT | KBPC608PT | KBPC610PT | UNITS |
|---|----------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| Maximum Instantaneous Forward Voltage at 3.0 A DC | V <sub>F</sub> | 1.0        |           |           |           |           |           |           | Volts |
| Maximum Reverse Current at rated                  | I <sub>R</sub> | 10         |           |           |           |           |           |           | uAmps |
| DC blocking Voltage per element                   |                | 0.2        |           |           |           |           |           |           | mAmps |

# RATING CHARACTERISTIC CURVES ( KBPC6005PT THRU KBPC610PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

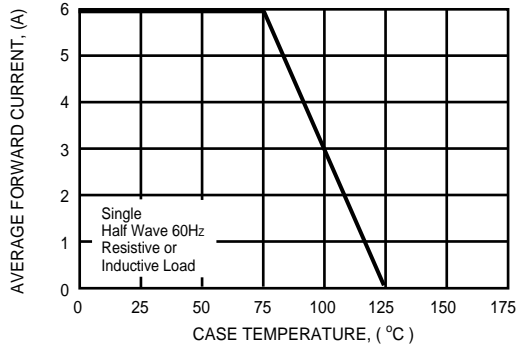


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

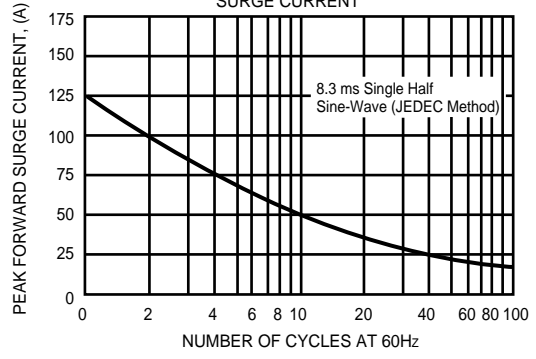


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

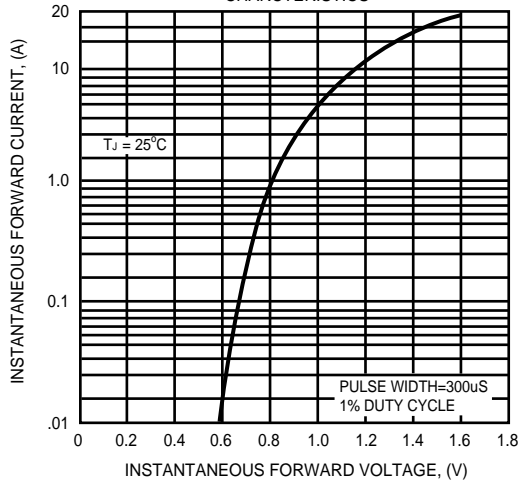


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

