



# KBPC300 THRU KBPC310

**SINGLE PHASE 3.0 AMPS. SILICON BRIDGE RECTIFIERS**



## FEATURES

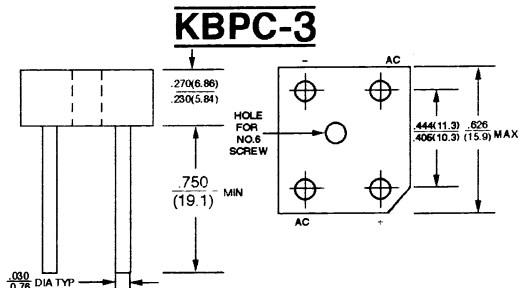
- \* Low forward voltage drop
- \* High Surge Current Capability
- \* Small size, simple installation
- \* Leads solderable per MIL-STD-202, method 208

## VOLTAGE RANGE

50 to 1000 Volts

CURRENT

3.0 Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%

| TYPE NUMBER                                                                                                                  | SYMBOLS     | KBPC 300      | KBPC 301 | KBPC 302 | KBPC 304 | KBPC 306 | KBPC 308 | KBPC 310 | UNITS                          |
|------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|----------|----------|----------|----------|----------|----------|--------------------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                                       | $V_{RRM}$   | 50            | 100      | 200      | 400      | 600      | 800      | 1000     | V                              |
| Maximum RMS Bridge Input Voltage                                                                                             | $V_{RMS}$   | 35            | 70       | 140      | 280      | 420      | 560      | 700      | V                              |
| Maximum D.C Blocking Voltage                                                                                                 | $V_{DC}$    | 50            | 100      | 200      | 400      | 600      | 800      | 1000     | V                              |
| Maximum Average Forward Rectified Current @ $T_C = 60^\circ\text{C}$                                                         | $I_{F(AV)}$ | 3.0           |          |          |          |          |          |          | A                              |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)                            | $I_{FSM}$   | 60            |          |          |          |          |          |          | A                              |
| Maximum Forward Voltage Drop per element @ 1.5A                                                                              | $V_F$       | 1.10          |          |          |          |          |          |          | V                              |
| Maximum Reverse Current at Rated @ $T_A = 25^\circ\text{C}$<br>D.C. Blocking Voltage per element @ $T_A = 100^\circ\text{C}$ | $I_R$       | 10<br>500     |          |          |          |          |          |          | $\mu\text{A}$<br>$\mu\text{A}$ |
| Operating Temperature Range                                                                                                  | $T_J$       | - 55 to + 125 |          |          |          |          |          |          | $^\circ\text{C}$               |
| Storage Temperature Range                                                                                                    | $T_{STG}$   | - 55 to + 150 |          |          |          |          |          |          | $^\circ\text{C}$               |

## RATINGS AND CHARACTERISTIC CURVES (KBPC300 THRU KBPC310)

FIG. 1-MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT - PER ELEMENT

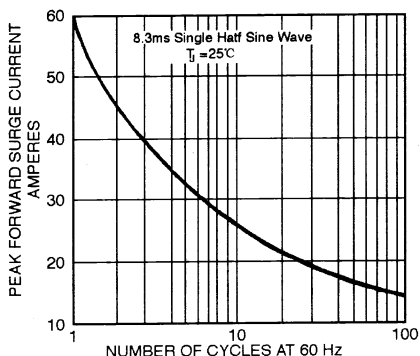


FIG. 2-TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE

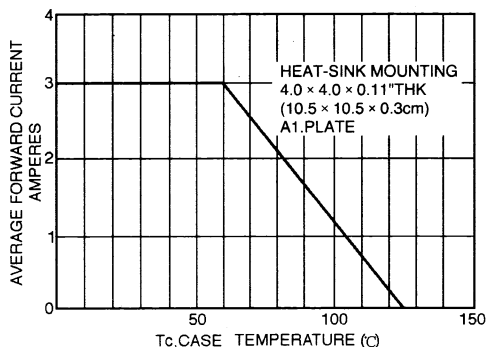


FIG. 3-TYPICAL FORWARD CHARACTERISTICS - PER ELEMENT

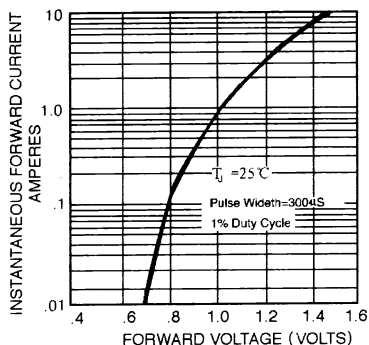


FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

