

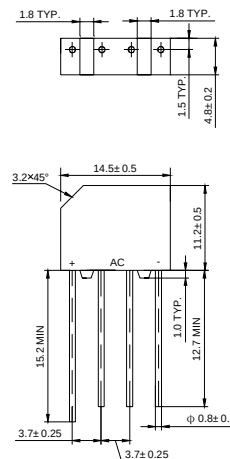
## SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V  
CURRENT: 2.0 A

### FEATURES

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 50 Amperes peak
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◇ Lead solderable per MIL-STD-202 method 208

### KBP



Dimensions in millimeters

### 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 by 20%.

|                                                                                                                |             | RS<br>201L     | RS<br>202L | RS<br>203L | RS<br>204L | RS<br>205L | RS<br>206L | RS<br>207L | UNITS               |
|----------------------------------------------------------------------------------------------------------------|-------------|----------------|------------|------------|------------|------------|------------|------------|---------------------|
| Maximum recurrent peak reverse voltage                                                                         | $V_{RRM}$   | 50             | 100        | 200        | 400        | 600        | 800        | 1000       | V                   |
| Maximum RMS 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<br>Output current @ $T_A = 25^\circ\text{C}$                                           | $I_{F(AV)}$ | 2.0            |            |            |            |            |            |            | A                   |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load                        | $I_{FSM}$   | 50.0           |            |            |            |            |            |            | A                   |
| Maximum instantaneous forward voltage<br>at 1.0 A                                                              | $V_F$       | 1.1            |            |            |            |            |            |            | V                   |
| Maximum reverse current @ $T_A = 25^\circ\text{C}$<br>at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$ | $I_R$       | 5.0<br>0.5     |            |            |            |            |            |            | $\mu\text{A}$<br>mA |
| Operating junction temperature range                                                                           | $T_J$       | - 55 --- + 150 |            |            |            |            |            |            | °C                  |
| Storage temperature range                                                                                      | $T_{STG}$   | - 55 --- + 150 |            |            |            |            |            |            | °C                  |

FIG.1 – PEAK FORWARD SURGE CURRENT

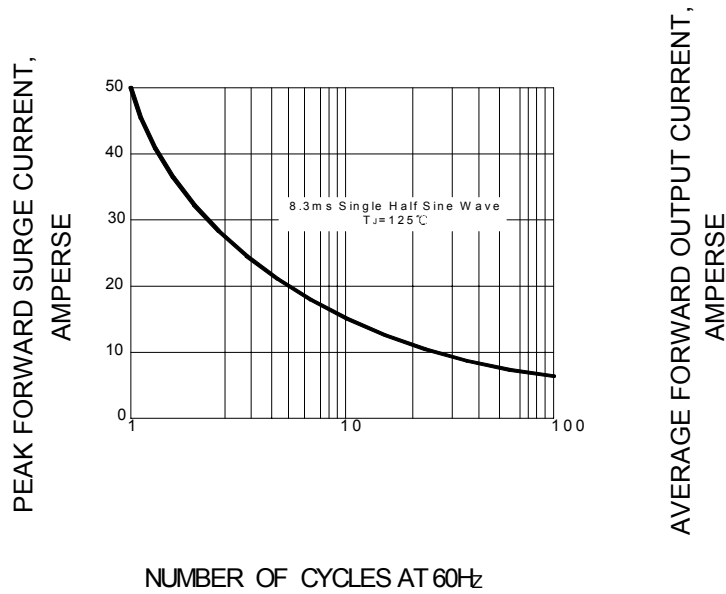


FIG.2 – FORWARD DERATING CURVE

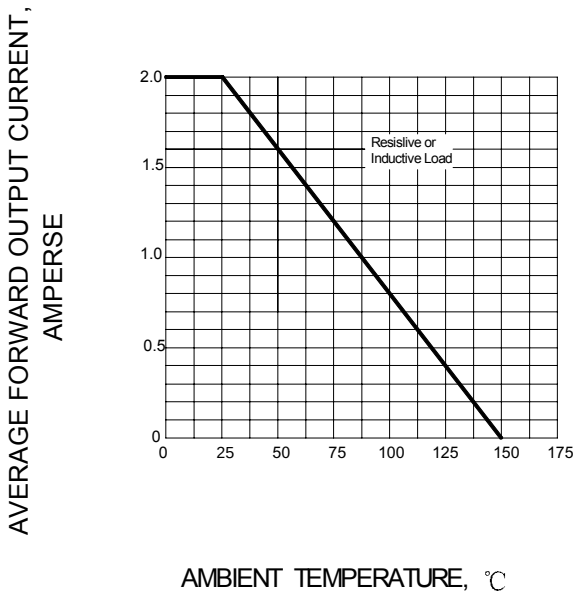


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

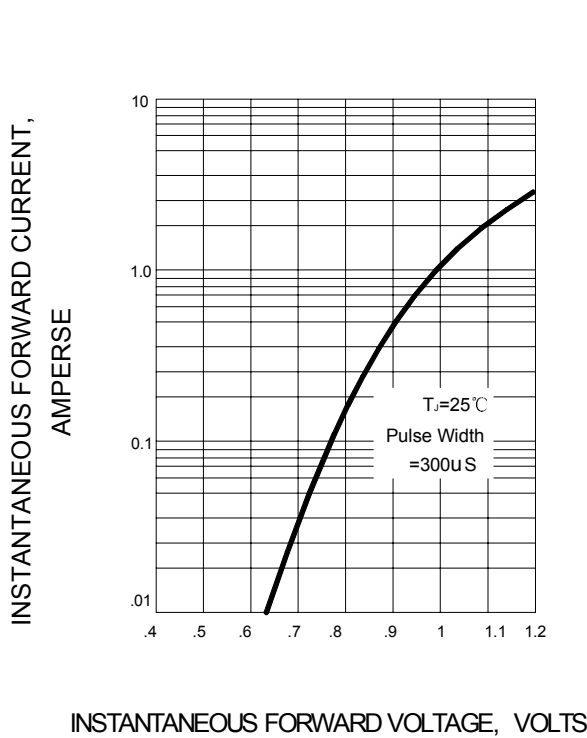


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

