# RS101-RS107

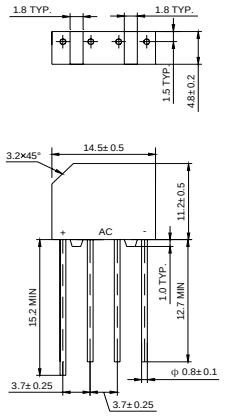
## Silicon Bridge Rectifiers

**VOLTAGE RANGE: 50 --- 1000 V**
**CURRENT: 1.0 A**

## Features

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 30 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 imillimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

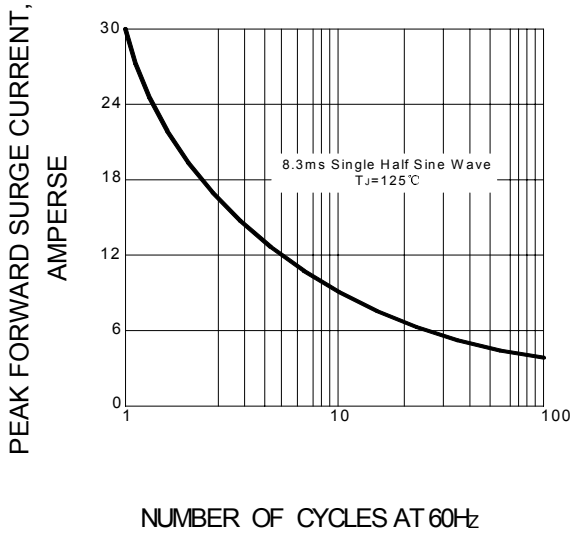
Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

| | | RS101 | RS102 | RS103 | RS104 | RS105 | RS106 | RS107 | 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 forw ard Output current @$T_A$=25℃ | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load | $I_{FSM}$ | 30 | | | | | | | A |
| I²t Rating for fusing @Tj=25℃ | I²t | 3.7 | | | | | | | A²S |
| Typical Junction Capacitance ( Note1) | CJ | 15 | | | | | | | pF |
| Maximum instantaneous forw ard voltage at 1.0 A | $V_F$ | 1.0 | | | | | | | V |
| Maximum reverse current @$T_A$=25℃ | $I_R$ | 5.0 | | | | | | | μA |
| at rated DC blocking voltage @$T_A$=125℃ | | 1.0 | | | | | | | mA |
| Typical thermal resistance per leg (Note1) | $R_{\Theta JA}$ | 50 | | | | | | | °C/W |
| | $R_{\Theta JC}$ | 15 | | | | | | | |
| Operating junction temperature range | $T_J$ | - 55 ---- + 150 | | | | | | | ℃ |
| Storage temperature range | $T_{STG}$ | - 55 ---- + 150 | | | | | | | ℃ |

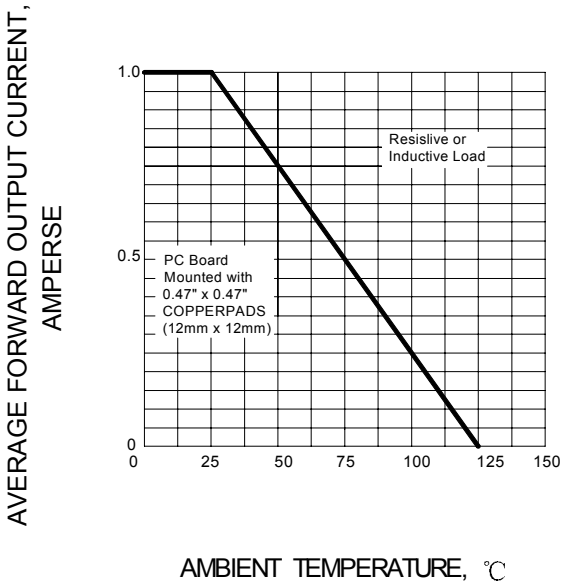
NOTES：1.Measured at 1 MHZ and applied reverse voltage of 4.0 volts

# Ratings AND Charactieristic Curves

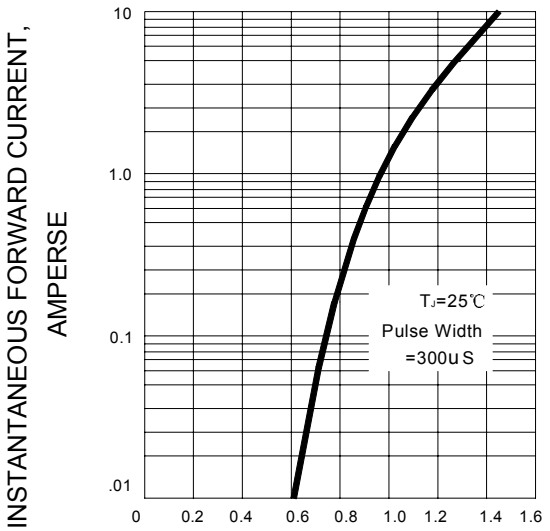
## FIG.1 -- PEAK FORWARD SURGE CURRENT




## FIG.2 -- FORWARD DERATING CURVE




## FIG.3 -- TYPICAL FORWARD CHARACTERISTIC




## FIG.4 -- TYPICAL REVERSE CHARACTERISTIC