ELECTRONICS INDUSTRY (USA) CO., LTD.

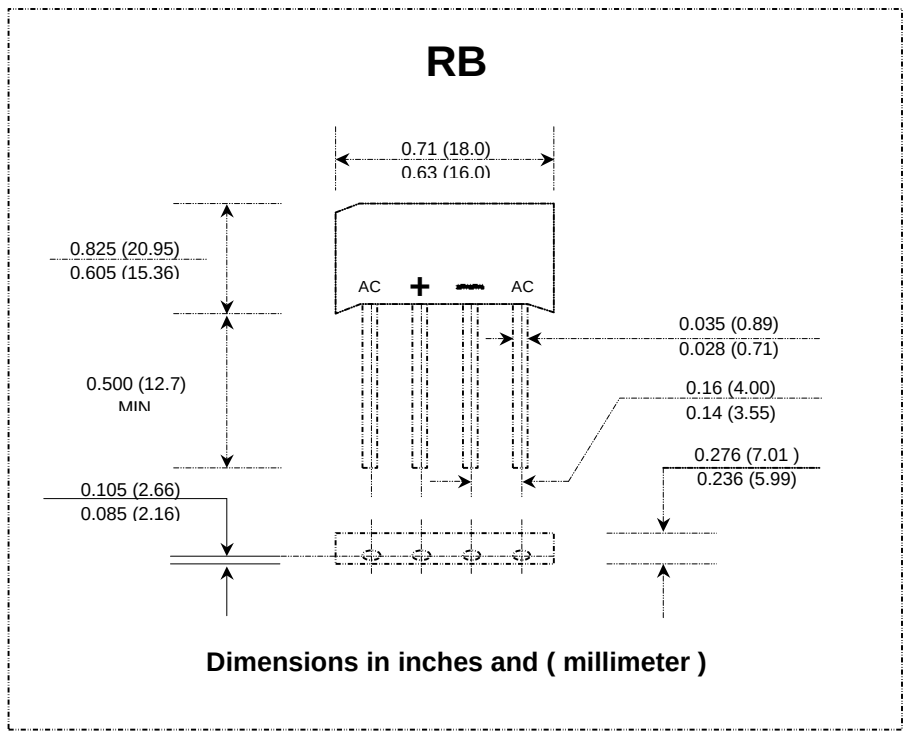
103 MOO 4, LATKRABANG EXPORT PROCESSING ZONE, LATKRABANG, BANGKOK 10520, THAILAND
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Certificate Number: Q10561 Certificate Number: E17276

# RB150 - RB158

# SILICON BRIDGE RECTIFIERS

## PRV : 50 - 800 Volts
## Io : 1.5 Amperes




### FEATURES :
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* High case dielectric strength of 2000 $V_{DC}$
* Ideal for printed circuit board

### MECHANICAL DATA :
* Case : Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Polarity symbols marked on case
* Mounting position : Any
* Weight : 3.4 grams

## 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%.

| RATING | SYMBOL | RB150 | RB151 | RB152 | RB154 | RB156 | RB158 | UNIT |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | Volts |
| Maximum RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | Volts |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | Volts |
| Maximum Average Forward Current Tc=50°C | $I_{F(AV)}$ | 1.5 | | | | | | Amps. |
| Peak Forward Surge Current, Single half sine wave Superimposed on rated load (JEDEC Method) | $I_{FSM}$ | 40 | | | | | | Amps. |
| Maximum Forward Voltage per Diode at $I_F$ = 1 Amp. | $V_F$ | 0.95 | | | | | | Volt |
| Maximum DC Reverse Current Ta = 25 °C | $I_R$ | 10 | | | | | | µA |
| at Rated DC Blocking Voltage Ta = 100 °C | $I_{R(H)}$ | 100 | | | | | | µA |
| Typical Thermal Resistance (Note 1) | RθJL | 15 | | | | | | °C/W |
| Operating Junction Temperature Range | $T_J$ | - 40 to + 140 | | | | | | °C |
| Storage Temperature Range | $T_{STG}$ | - 40 to + 140 | | | | | | °C |

**Notes :**

1 ) Thermal resistance from Junction to lead mounted on P.C. Board with 0.47" X 0.47" ( 12mm X 12mm ) Cu pads.

**UPDATE : NOVEMBER 1,1998**

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# RATING AND CHARACTERISTIC CURVES ( RB150 - RB158 )

**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**

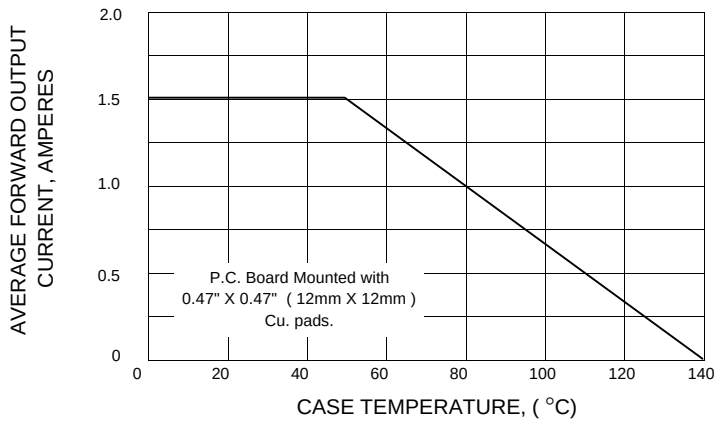



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

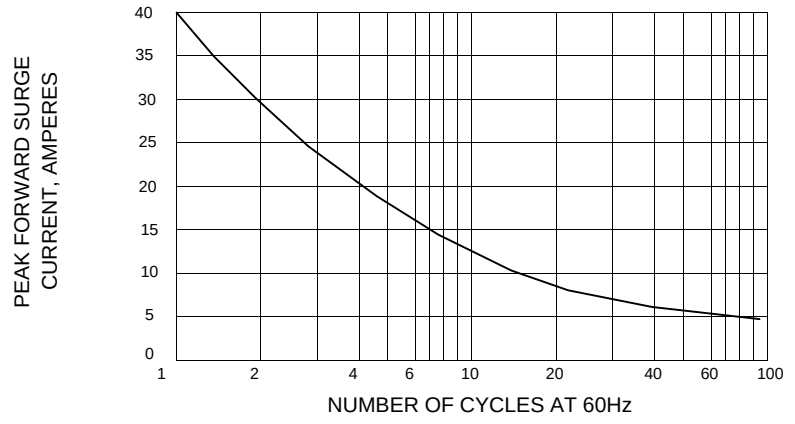



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE**

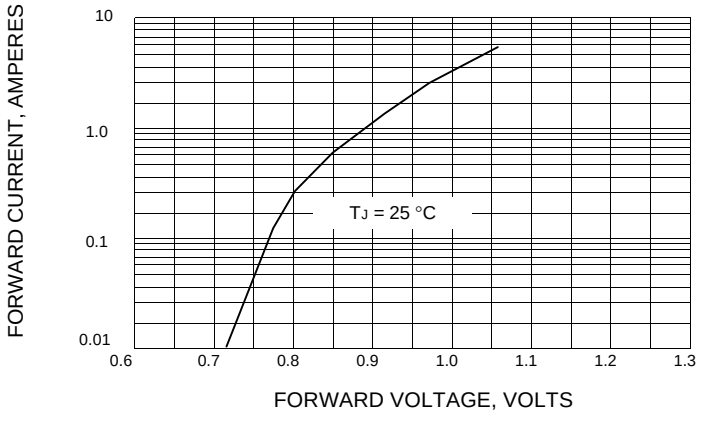



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

