



**ELECTRONICS INDUSTRY (USA) CO., LTD.**



103 MOO 4, LATKRABANG EXPORT PROCESSING ZONE, LATKRABANG, BANGKOK 10520, THAILAND  
 TEL. : (66 2) 326-0102, 739-4580 FAX. : (66 2) 326-0933 E-mail : eicfirst @ iname.com http. : // www.eicsemi.com

# RB150 - RB158

**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<sub>DC</sub>
- \* 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

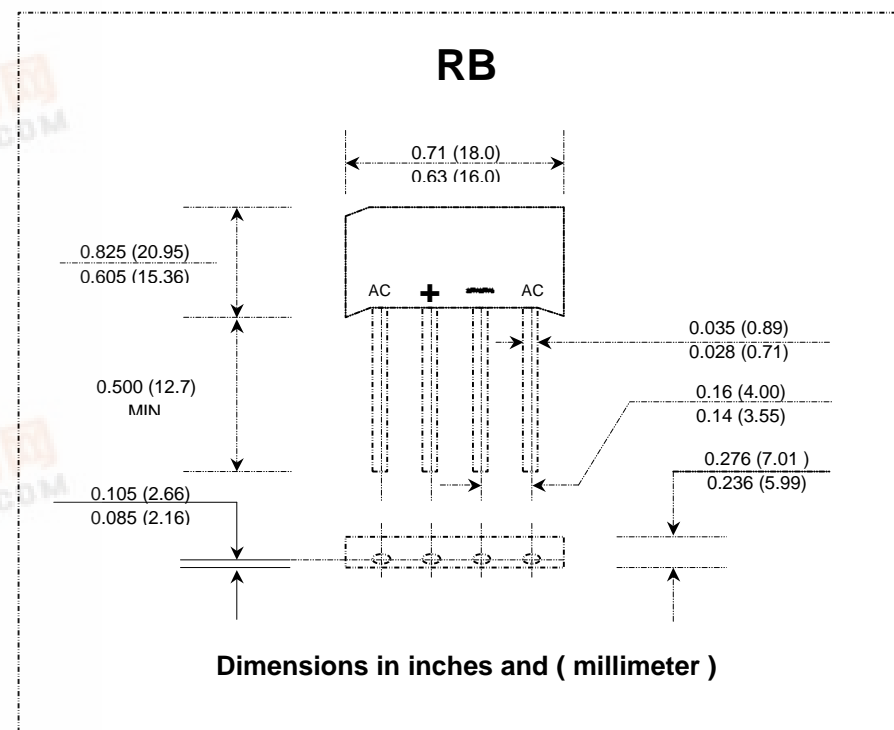
Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

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

## SILICON BRIDGE RECTIFIERS





**ELECTRONICS INDUSTRY (USA) CO., LTD.**

103 MOO 4, LATKRABANG EXPORT PROCESSING ZONE, LATKRABANG, BANGKOK 10520, THAILAND  
TEL. : (66 2) 326-0102, 739-4580 FAX. : (66 2) 326-0933 E-mail : eicfirst @ iname.com http. : // www.eicsemi.com



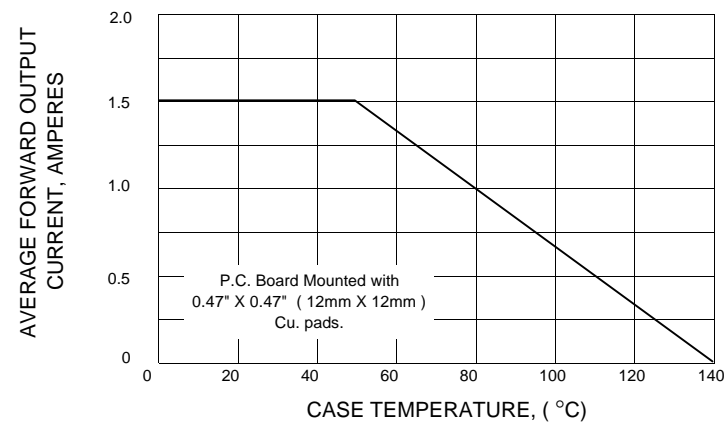
Certificate Number: Q10561



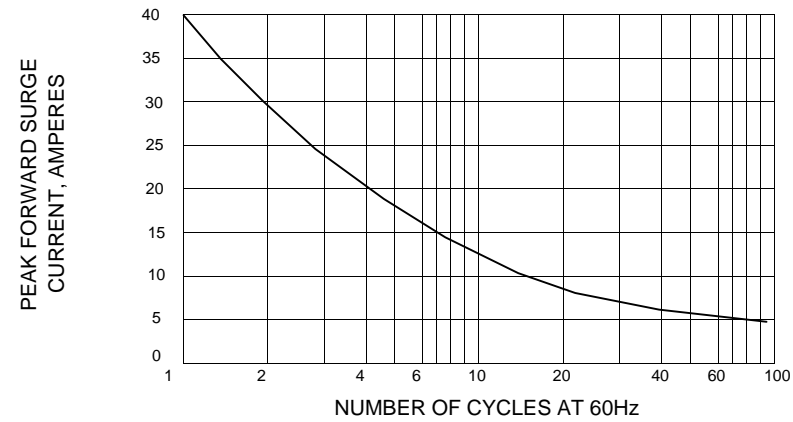
Certificate Number: E17276

### RATING AND CHARACTERISTIC CURVES ( RB150 - RB158 )

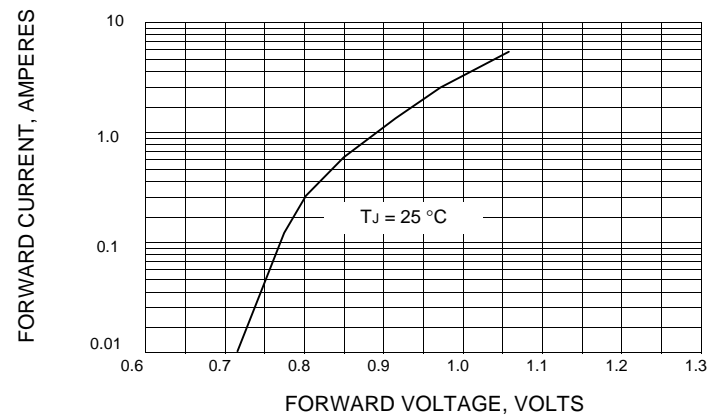
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



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



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

