

RB150 - RB158

PRV : 50 - 800 Volts

Io : 1.5 Amperes

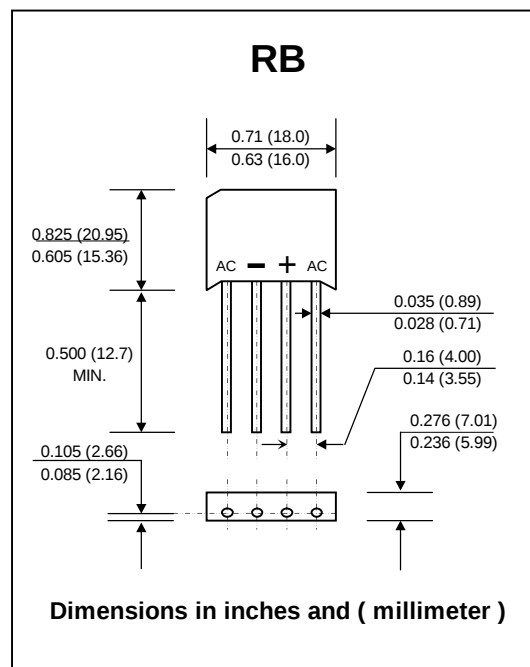
FEATURES :

- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * High case dielectric strength of 2000 V_{DC}
- * Ideal for printed circuit board
- * **Pb / RoHS Free**

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

SILICON BRIDGE RECTIFIERS



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	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current T _c =50°C	I _{F(AV)}	1.5						A
Peak Forward Surge Current, Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	40						A
Maximum Forward Voltage per Diode at I _F = 1 A	V _F	0.95						V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	I _R	10						μA
	I _{R(H)}	100						μA
Typical Thermal Resistance (Note 1)	R _{θJL}	15						°C/W
Operating Junction Temperature Range	T _J	- 40 to + 140						°C
Storage Temperature Range	T _{STG}	- 40 to + 140						°C

Note :

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

RATING AND CHARACTERISTIC CURVES (RB150 - RB158)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

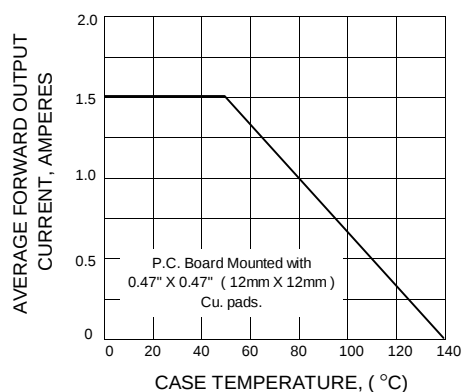


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

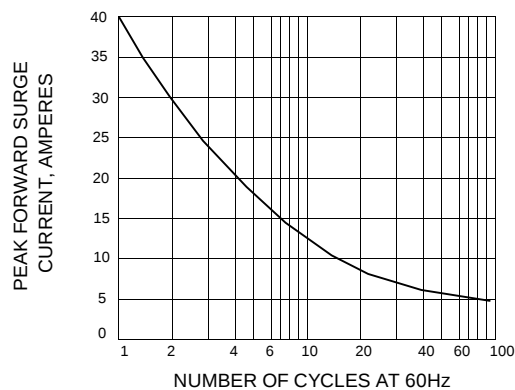


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

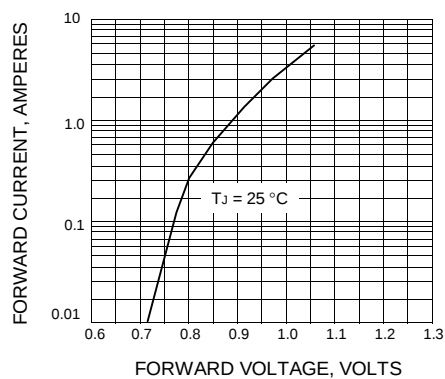


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

