

# RBV401 - RBV406

**PRV : 100 - 600 Volts**

**Io : 4.0 Amperes**

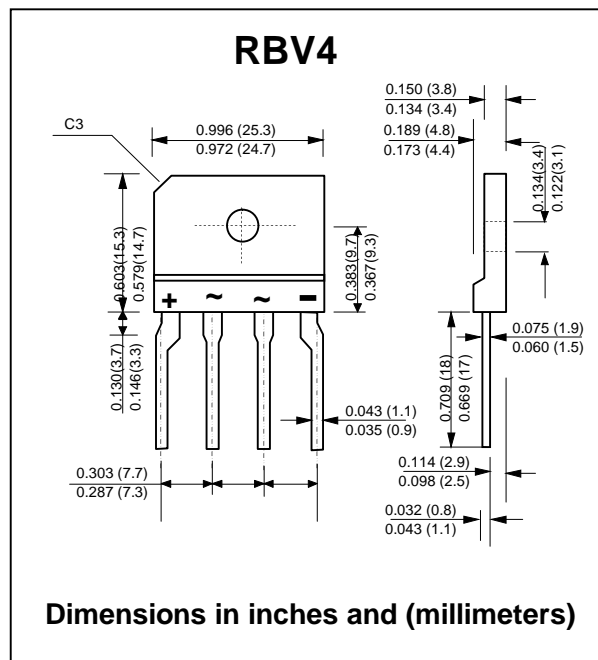
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Ideal for printed circuit board
- \* Very good heat dissipation
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Reliable low cost construction utilizing molded plastic technique
- \* 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 : 4.28 grams

# SILICON BRIDGE RECTIFIERS



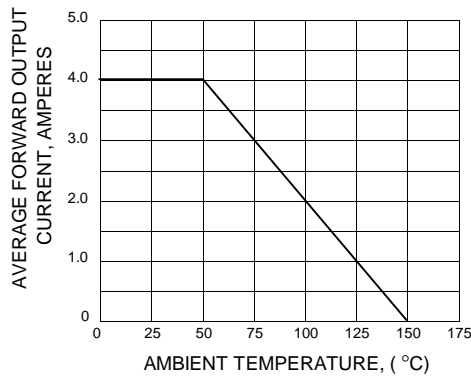
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.

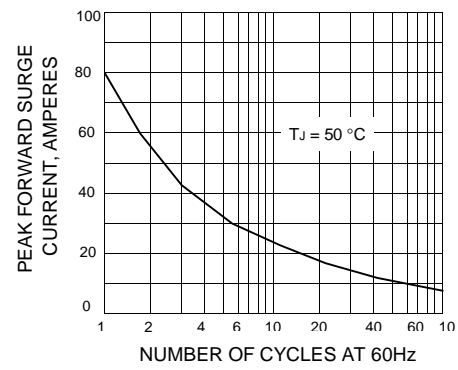
RATING	SYMBOL	RBV401	RBV402	RBV404	RBV406	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	V
Maximum Reverse Voltage	V <sub>R</sub>	100	200	400	600	V
Maximum Average Forward Rectified Current T <sub>c</sub> =50°C	I <sub>F(AV)</sub>	4.0				A
Maximum Peak Forward Surge Current ( 50 Hz, Half-cycle, Sinwave, Single Shot )	I <sub>FSM</sub>	80				A
Maximum Forward Voltage per Diode at I <sub>F</sub> = 2.0 A	V <sub>F</sub>	1.05		1.1		V
Maximum Reverse Current at Reverse Voltage	I <sub>R</sub>	10				μA
Maximum Reverse Current at Reverse Voltage T <sub>a</sub> = 100 °C	I <sub>R(H)</sub>	100				μA
Thermal Resistance, Junction to Case	R <sub>θJC</sub>	5.0				°C/W
Operating Junction Temperature Range	T <sub>J</sub>	- 40 to + 150				°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150				°C

**RATING AND CHARACTERISTIC CURVES ( RBV401 THRU RBV406 )**

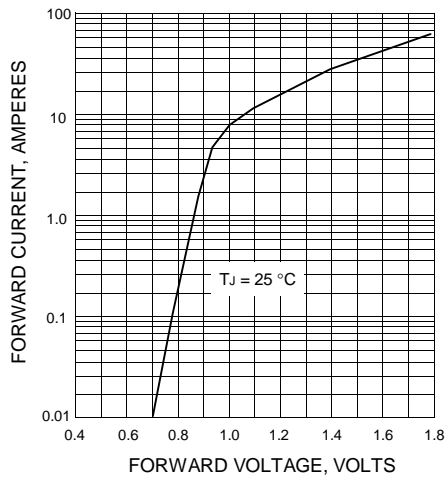
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

