

# **RBV401 - RBV406**

PRV: 100 - 600 Volts

lo: 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

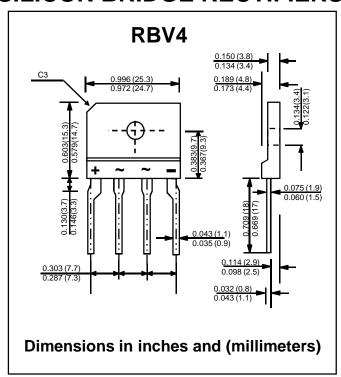
#### **MECHANICAL DATA:**

- \* Case : Reliable low cost construction utilizing molded plastic technique
- \* Epoxy : UL94V-0 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	VRRM	100	200	400	600	V
Maximum Reverse Voltage	VR	100	200	400	600	V
Maximum Average Forward Rectified Current Tc=50°C	<b>I</b> F(AV)	4.0				Α
Maximum Peak Forward Surge Current	I		90			
( 50 Hz, Half-cycle, Sinwave, Single Shot )	IFSM 80				Α	
Maximum Forward Voltage per Diode at IF = 2.0 A	VF	1.05 1.1			V	
Maximum Reverse Current at Reverse Voltage	IR	10				μΑ
Maximum Reverse Current at Reverse Voltage Ta = 100 °C	I <sub>R(H)</sub>	100				μΑ
Thermal Resistance, Junction to Case	RθJC	5.0				°C/W
Operating Junction Temperature Range	TJ	- 40 to + 150				°C
Storage Temperature Range	Тѕтс	- 40 to + 150				°C

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## RATING AND CHARACTERISTIC CURVES (RBV401 THRU RBV406) FIG.1 - DERATING CURVE FOR OUTPUT FIG.2 - MAXIMUM NON-REPETITIVE PEAK RECTIFIED CURRENT FORWARD SURGE CURRENT AVERAGE FORWARD OUTPUT CURRENT, AMPERES 5.0 100 PEAK FORWARD SURGE CURRENT, AMPERES 4.0 80 3.0 60 2.0 40 1.0 20 10 20 NUMBER OF CYCLES AT 60Hz AMBIENT TEMPERATURE, ( $^{\circ}$ C) FIG.3 - TYPICAL FORWARD CHARACTERISTICS FIG.4 - TYPICAL REVERSE CHARACTERISTICS TJ = 100 °C FORWARD CURRENT, AMPERES REVERSE CURRENT, MICROAMPERES 0.1 1.0 T<sub>J</sub> = 25 °C = 0.01 40 PERCENT OF RATED REVERSE VOLTAGE, (%) 0.01 1.0 0.4 0.8 FORWARD VOLTAGE, VOLTS

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