

## RBV800 - RBV810

PRV : 50 - 1000 Volts

Io : 8.0 Amperes

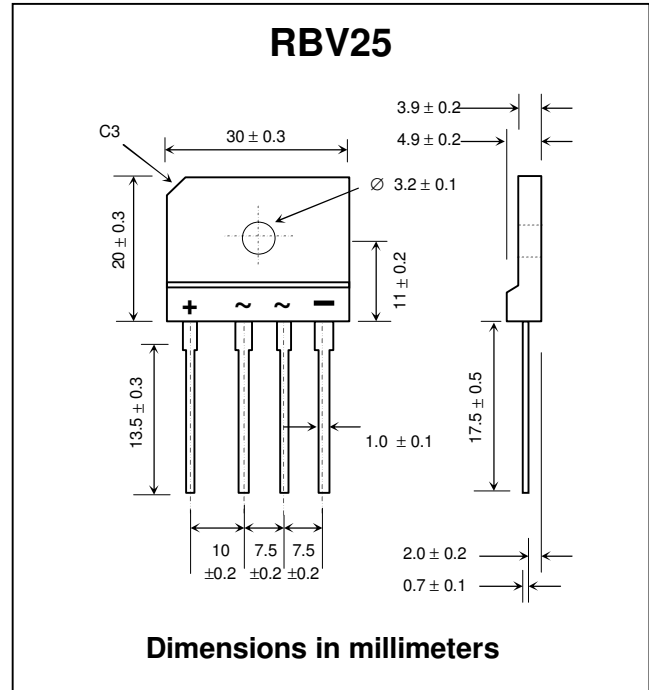
### FEATURES :

- \* High current capability
- \* 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
- \* 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 : 7.97 grams ( Approximally )

## 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%.

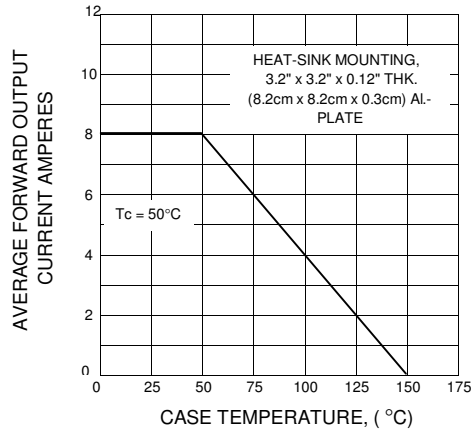
RATING	SYMBOL	RBV 800	RBV 801	RBV 802	RBV 804	RBV 806	RBV 808	RBV 810	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_c = 55^\circ\text{C}$	$I_{F(AV)}$	8.0							A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	300							A
Current Squared Time at $t < 8.3$ ms.	$i^2t$	160							A <sup>2</sup> S
Maximum Forward Voltage per Diode at $I_F = 4.0$ A	$V_F$	1.0							V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	$I_{R(H)}$	200							$\mu\text{A}$
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.5							$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	- 40 to + 150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 40 to + 150							$^\circ\text{C}$

#### Notes :

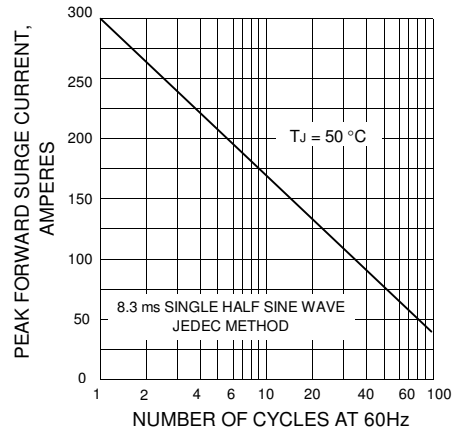
1. Thermal Resistance from junction to case with units mounted on a 3.2"x3.2"x0.12" THK (8.2cm.x8.2cm.x0.3cm.) Al. Plate. heatsink.

**RATING AND CHARACTERISTIC CURVES ( RBV800 - RBV810 )**

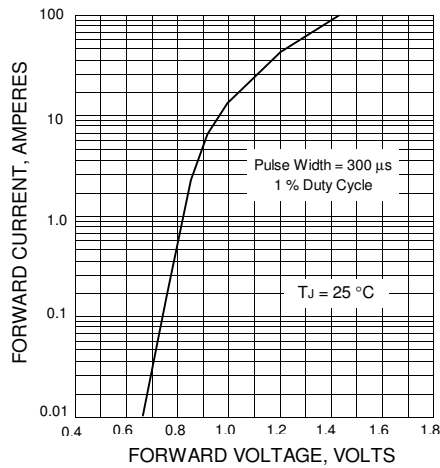
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



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



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE**

