

RBV800 - RBV810

PRV : 50 - 1000 Volts

Io : 8.0 Amperes

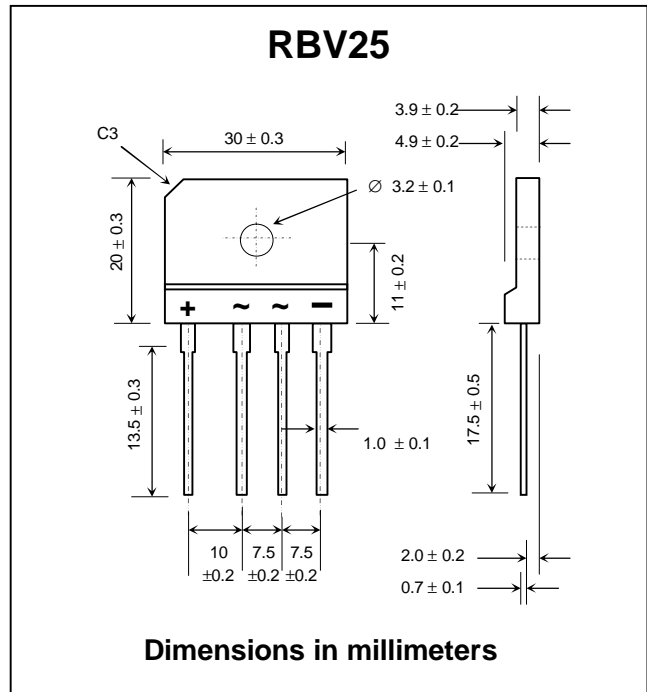
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * High case dielectric strength of 2000 V_{DC}
- * 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 (Approximaly)

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°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 ² t	160							A ² S
Maximum Forward Voltage per Diode at I _F = 4.0 A	V _F	1.0							V
Maximum DC Reverse Current T _a = 25 °C	I _R	10							μA
at Rated DC Blocking Voltage T _a = 100 °C	I _{R(H)}	200							μA
Typical Thermal Resistance (Note 1)	R _{θJC}	2.5							°C/W
Operating Junction Temperature Range	T _J	- 40 to + 150							°C
Storage Temperature Range	T _{STG}	- 40 to + 150							°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.



SYNSEMI SEMICONDUCTOR

RATING AND CHARACTERISTIC CURVES (RBV800 - RBV810)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

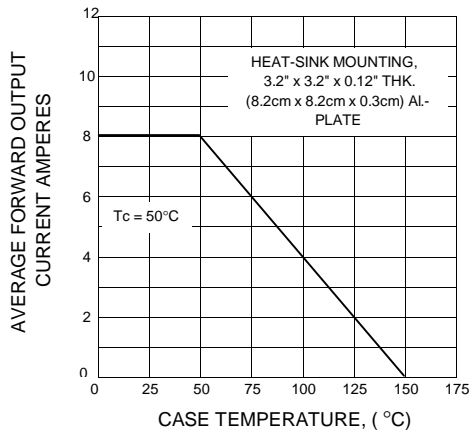


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

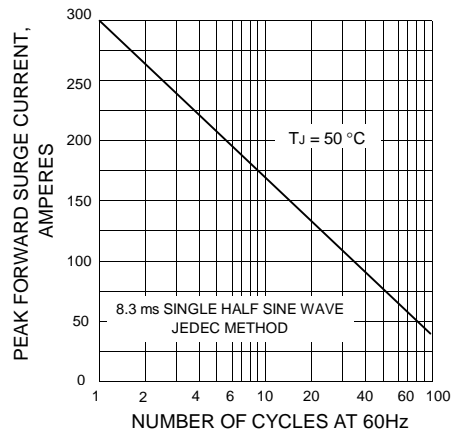


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

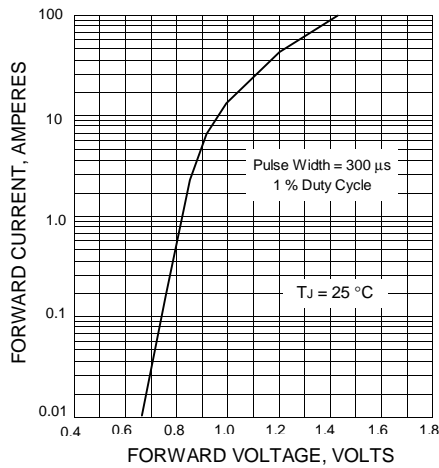


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

