

RBV600 - RBV610

PRV : 50 - 1000 Volts

Io : 6.0 Amperes

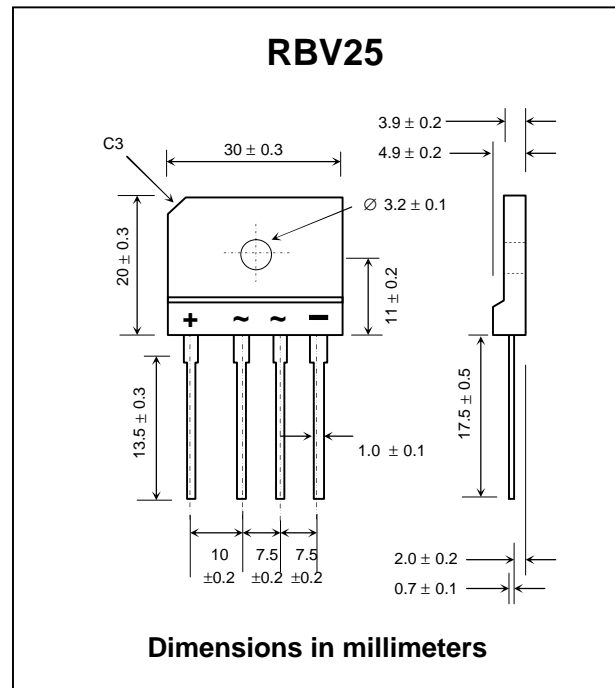
FEATURES :

- * 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 : 7.80 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 600	RBV 601	RBV 602	RBV 604	RBV 605	RBV 606	RBV 608	RBV 610	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	500	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	350	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	500	600	800	1000	V
Maximum Average Forward Current T _c = 55°C	I _{F(AV)}	6.0								A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	200								A
Current Squared Time at t < 8.3 ms.	I ² t	64								A ² S
Maximum Forward Voltage per Diode at I _F = 3.0 A	V _F	1.0								V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	I _R	10								μA
	I _{R(H)}	200								μA
Typical Thermal Resistance (Note 1)	R _{θJC}	8.0								°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 2.6"x1.4"x0.06" THK (6.5cm.x3.5cm.x0.15cm.) Al. Plate. Heatsink.

RATING AND CHARACTERISTIC CURVES (RBV600 - RBV610)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

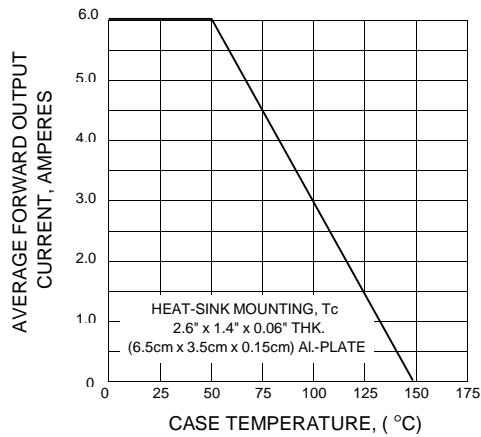


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

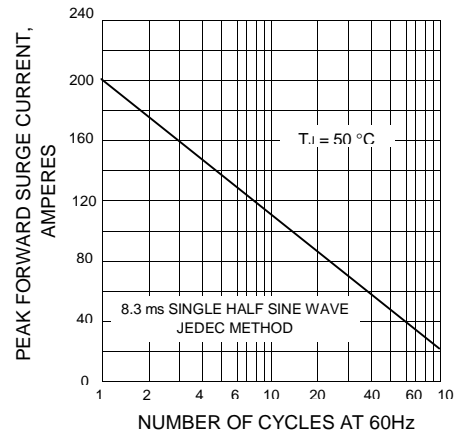


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

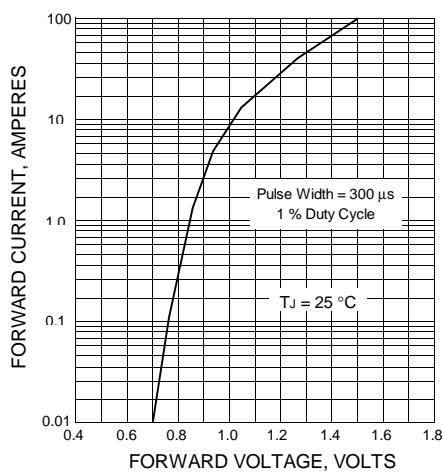


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

