

CURRENT 50 Ampere
VOLTAGE RANG 50 to 1000 Volts

RBV5000 THRU RBV5010

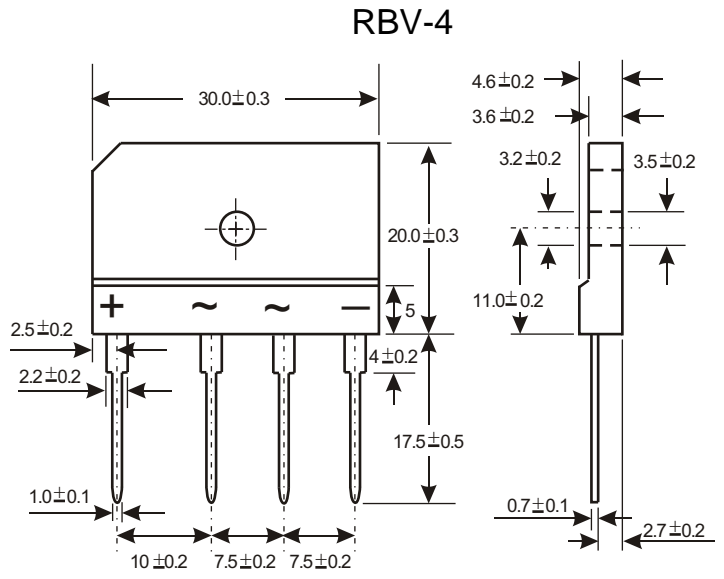
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * High case dielectric strength of 2000VDC
- * Ideal for printed circuit board
- * Very good heat dissipation
- * This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902



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 : 10.00 grams (Approximaly)



Dimensions in millimeters(1mm = 0.0394")

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 5000	RBV 5001	RBV 5002	RBV 5004	RBV 5006	RBV 5008	RBV 5010	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 $T_c = 55^\circ C$	$I_{F(AV)}$	50							A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	400							A
Current Squared Time at $t < 8.3$ ms.	I^2t	660							A ² S
Maximum Forward Voltage per Diode at $I_F = 25$ A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10							μA
	$I_{R(H)}$	200							μA
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.5							$^\circ C/W$
Operating Junction Temperature Range	T_J	10							$^\circ C$
Storage Temperature Range	T_{STG}	- 40 to + 150							$^\circ C$

Note :

1. Thermal Resistance from junction to case with units mounted on heatsirk.

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Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

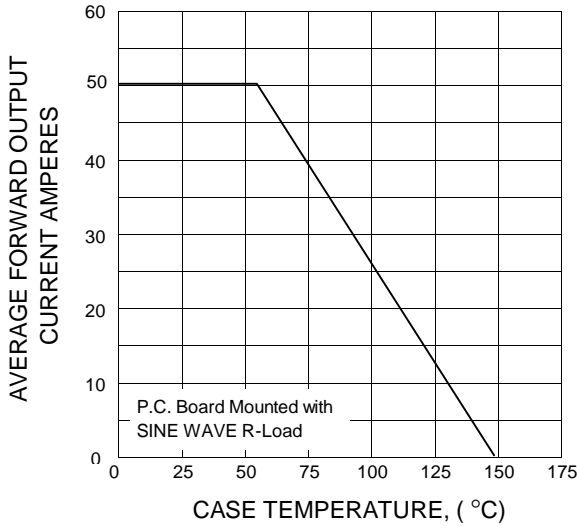


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

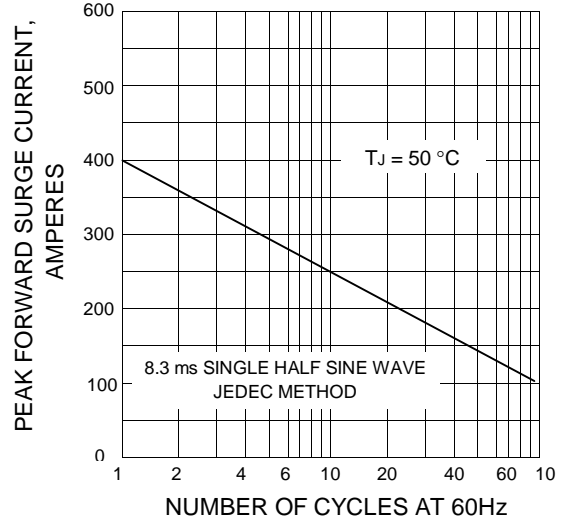


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

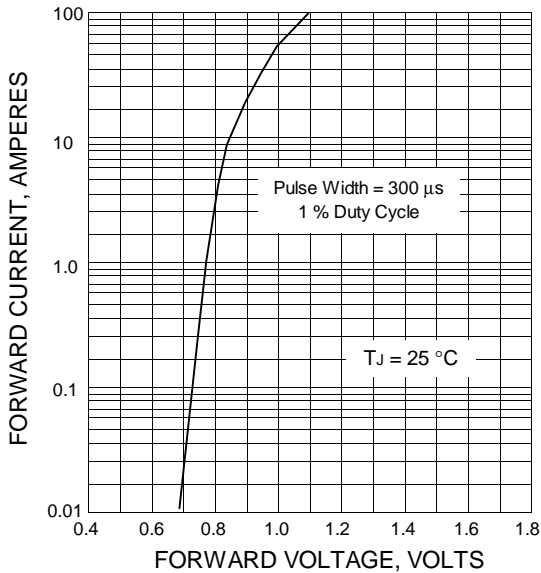


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

