RBV800D - RBV810D

SILICON BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts
Io : 8.0 Amperes

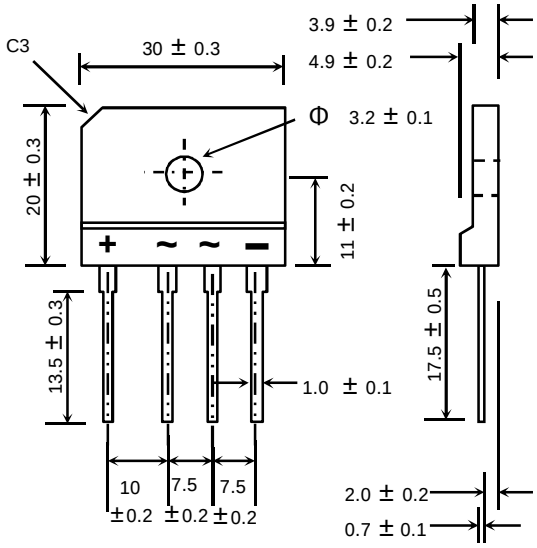
FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Rated isolation-voltage 2000 V_{AC}
* 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 : 7.97 grams (Approximaly)

RBV25



Dimensions in millimeters

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 800D	RBV 801D	RBV 802D	RBV 804D	RBV 806D	RBV 808D	RBV 810D	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 Tc = 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^2t	166							A^2S
Maximum Forward Voltage per Diode at I_F = 8.0 A	V_F	1.0							V
Maximum DC Reverse Current Ta = 25 °C	I_R	10							μA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	200							μA
Typical Thermal Resistance (Note 1)	RθJC	2.2							°C/W
Typical Thermal Resistance at Junction to Ambient	RθJA	15							°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.

RATING AND CHARACTERISTIC CURVES (RBV800D - RBV810D)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

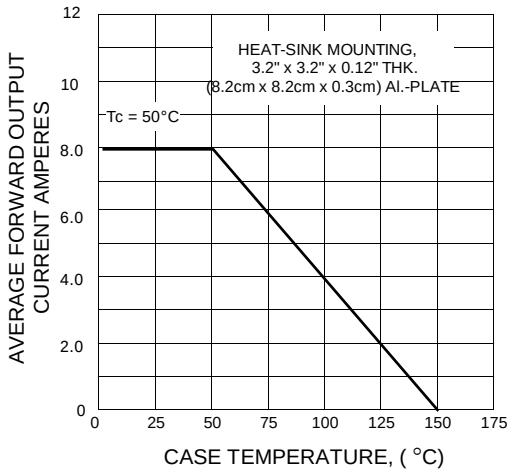


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

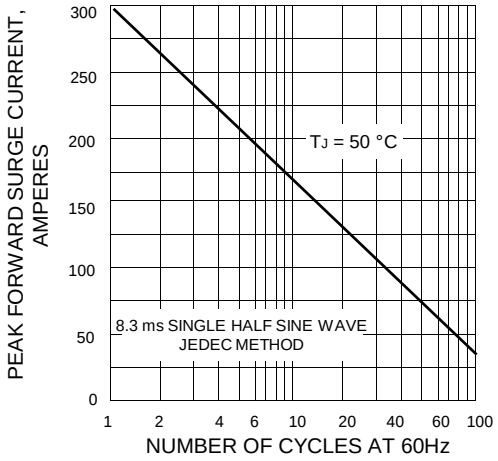


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

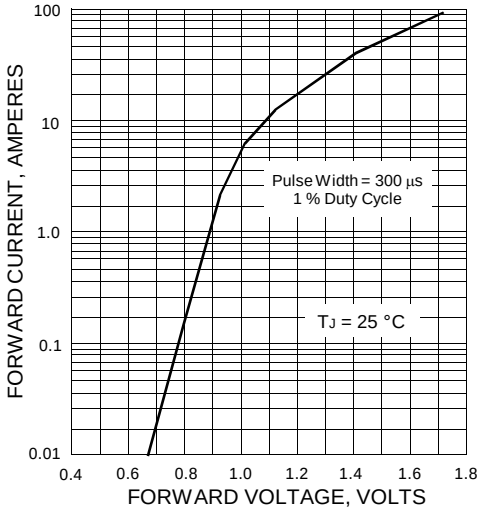


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

