



RDB201 thru RDB207

2.0 A, Fast Recovery Glass Passivated Bridge Rectifier

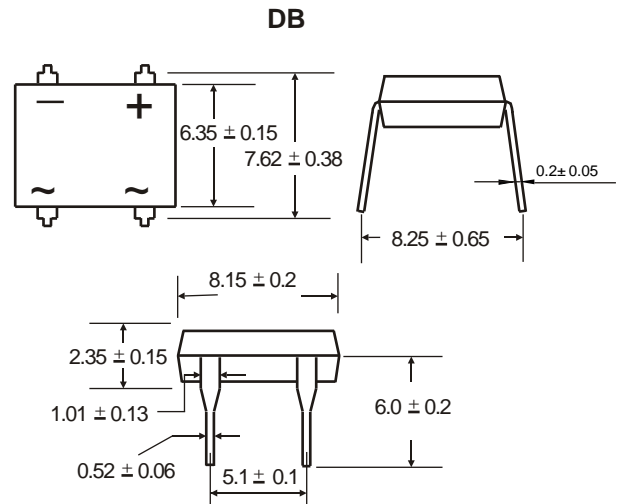
Rectifier Reverse Voltage 50 to 1000V

Features

- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 50 amperes
- Ideal for printed circuit board application
- High temperature soldering guaranteed 260 °C /5 seconds at 5 lbs (2.3kg) tension

Mechanical Data

Case: Molded plastic
 Terminals: Plated leads solderable per MIL-STD-202, Method 208
 Polarity: Marked on body
 Mounting Position: Any
 Weight: 0.34 grams (approx)



Dimensions in millimeters (1mm =0.0394")

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
 For Capacitive load derate current by 20%.

Parameter	Symbol	RDB201	RDB202	RDB203	RDB204	RDB205	RDB206	RDB207	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							A
Rating for fusing (t<8.3ms)	I ² t	10.3							A ² sec
Maximum reverse recovery time (Note 2)	t _{rr}	150			250		500		ns
Typical junction capacitance per element	C _J	25.0							pF
Operating junction and storage temperature range	T _J , T _{STG}	-55 to + 150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
 For Capacitive load derate by 20 %.

Parameter	Symbol	RDB201	RDB202	RDB203	RDB204	RDB205	RDB206	RDB207	Unit
Maximum instantaneous forward voltage drop per leg at 2.0A	V _F	1.3							V
Maximum DC reverse current at rated DC blocking voltage per element	I _R	10 500							μA

Notes: (1) Thermal resistance from Junction to Ambient on P.C.board mounting.
 (2): Reverse recovery time test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Rating and Characteristic Curves ($T_A=25^\circ\text{C}$ Unless otherwise noted)

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Fig. 1 Derating Curve for Output Rectified Current

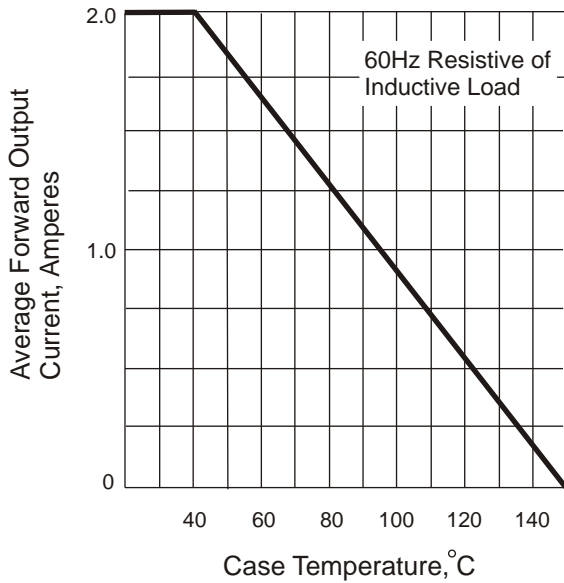


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

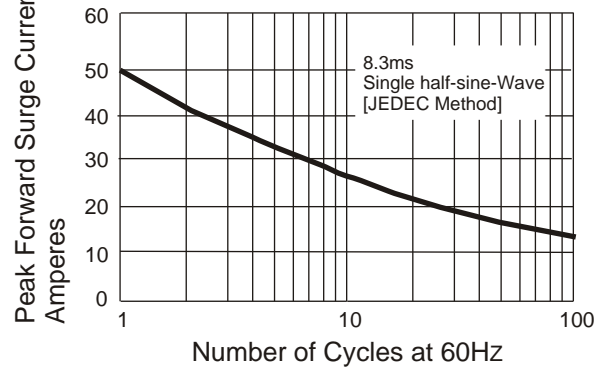


Fig. 3 Typical Instantaneous Forward Characteristics

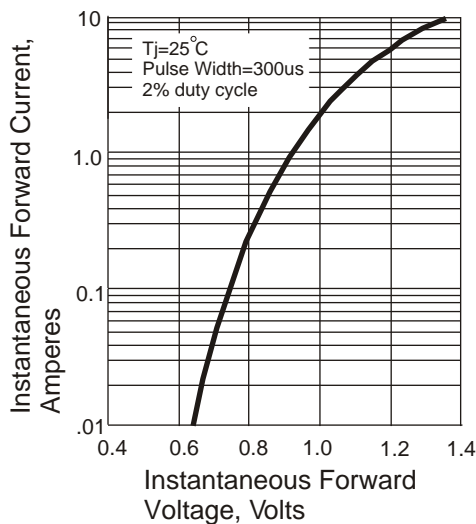


Fig. 4 Typical Revers Characteristics

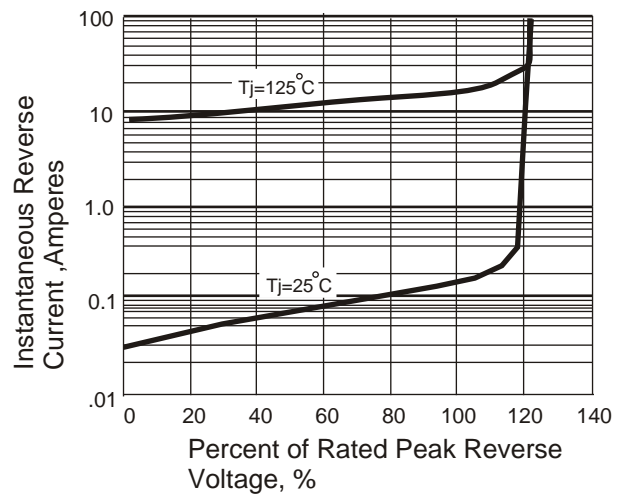


Fig. 5 Typical Junction Capacitance

