



JUXINTONG

## DB151 thru DB157

### 1.5 A Single-Phase Glass Passivated Bridge Rectifiers

Rectifier Reverse Voltage 50 to 1000V

#### Features

- This series is UL listed under the Recognized Component Index, file number E142814
- 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

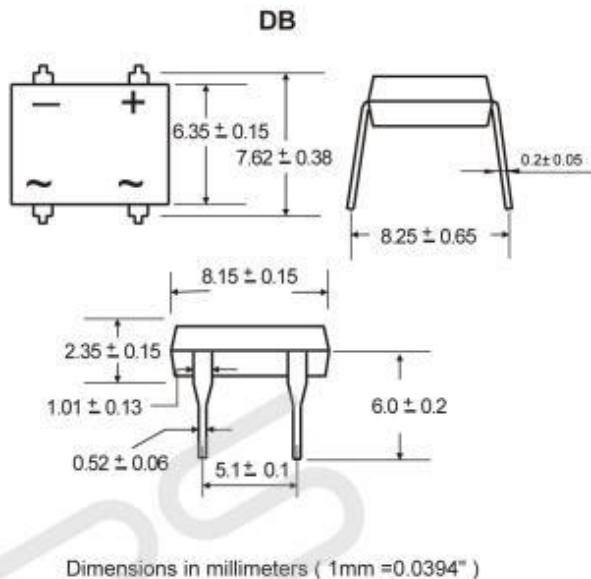
Case: Molded plastic

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Polarity: Marked on body

Mounting Position: Any

Weight: 0.34 grams (approx)



#### 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	DB151	DB152	DB153	DB154	DB155	DB156	DB157	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)				1.5				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				50				A
Rating for fusing (t<8.3ms)	I <sup>2</sup> t				6.35				A <sup>2</sup> sec
Typical thermal resistance per element (1)	ReJA				58				°C / W
Typical junction capacitance per element (2)	C <sub>j</sub>				25.0				pF
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>				-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 %.

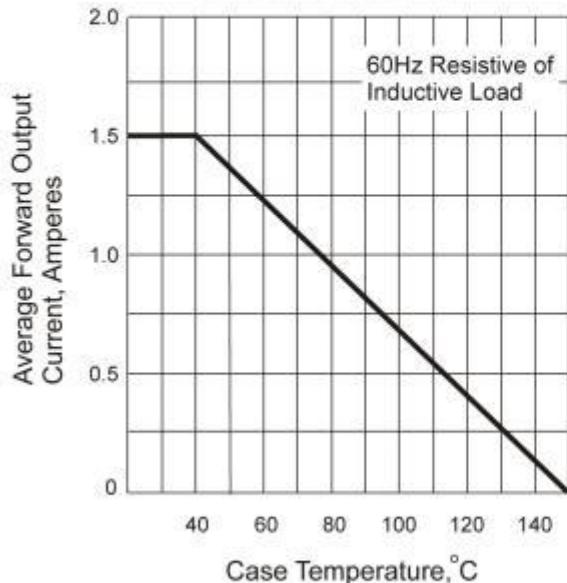
Parameter	Symbol	DB151	DB152	DB153	DB154	DB155	DB156	DB157	Unit
Maximum instantaneous forward voltage drop per leg at 1.5A	VF				1.1				V
Maximum DC reverse current at rated TA = 25°C DC blocking voltage per element TA = 125°C	IR				10 500				μA

Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

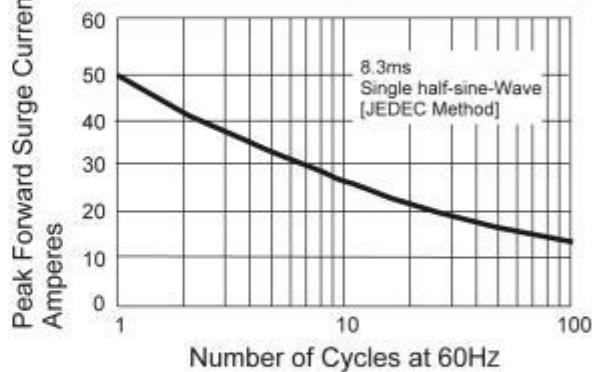
(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

**Rating and Characteristic Curves** (  $T_A=25^\circ\text{C}$  Unless otherwise noted )  
**DB151 thru DB157**

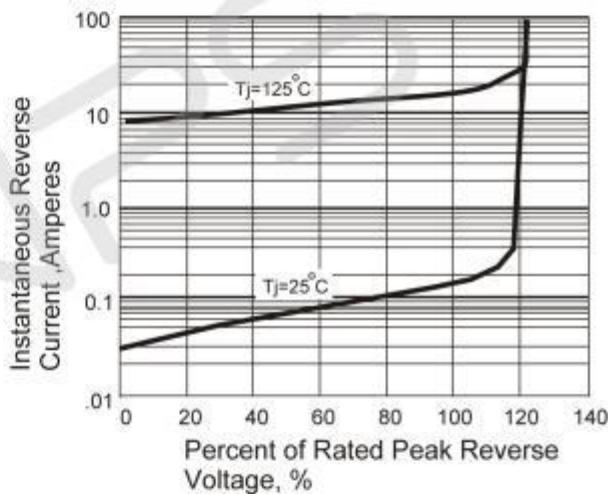
**Fig. 1 Derating Curve for Output Rectified Current**



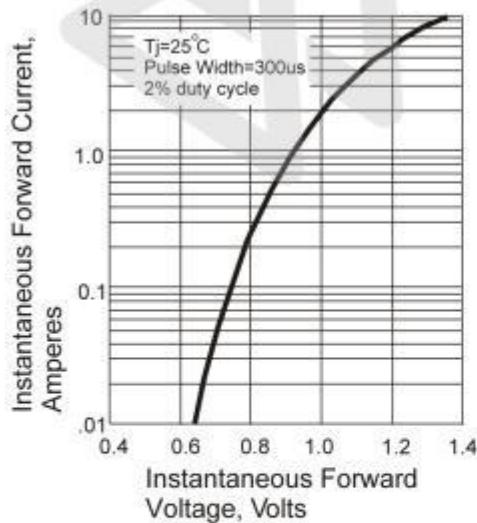
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 4 Typical Reverse Characteristics**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 5 Typical Junction Capacitance**

