

DB151 THRU DB157

SINGLE PHASE 1.5AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

0.024 (0.60) 0.016 (0.40)

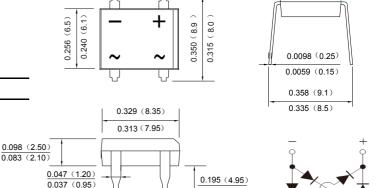
Features

- Glass passivated die construction
- · Low forward voltage drop
- · High current capability
- · High surge current capability
- · Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- · Case: DB-M, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- · Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version

DB-M



Dimensions in inches and (millimeters)

0.209 (5.3) 0.193 (4.9)

0.179 (4.55)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	DB151	DB152	DB153	DB154	DB155	DB156	DB157	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM								
	VRWM	50	100	200	400	600	800	1000	V
	VDC								
RMS Reverse Voltage	VRMS	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@Tc=100℃	IF(AV)	1.5							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	lғsм	55							А
I ² t Rating for Fusing (t < 8.3ms)	l²t	12.554							A ² s
Forward Voltage per element @IF=1.5A	V _{FM}	1.0							V
Peak Reverse Current @Ta=25℃ At Rated DC Blocking Voltage @Ta=125℃	lR	5.0 200							uA
Typical Junction Capacitance per leg (Note 2)	Сл	25							pF
Typical Thermal Resistance per leg	RөJA	40							°C/W
	Rejl	15							
Operating and Storage Temperature Range	TJ,TsTG	-55to+150							$^{\circ}$

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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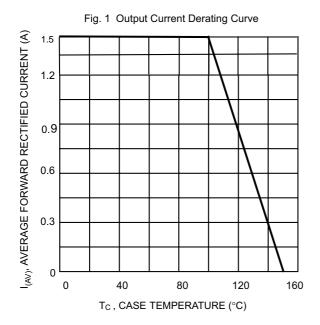


Fig. 2 Typical Forward Characteristics (per leg) 10 I_F, INSTANTANEOUS FORWARD CURRENT (A) 1.0 0.1 Pulse Width = 300µs 0.01 0.2 0.4 0.6 8.0 1.0 1.2 1.4 1.6 V_F, INSTANTANEOUS FORWARD VOLTAGE (V)

Fig. 3 Maximum Peak Forward Surge Current (per leg)

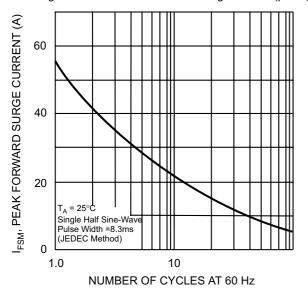
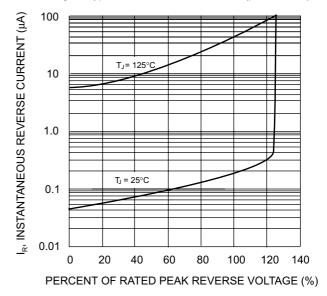


Fig. 4 Typical Reverse Characteristics (per element)



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