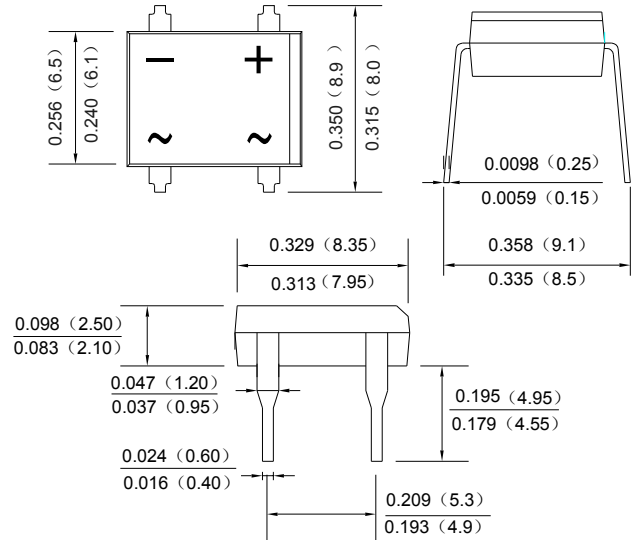


### Features

- 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

### DB-M



Dimensions in inches and (millimeters)

### 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

### 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	DB301	DB302	DB303	DB304	DB305	DB306	DB307	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>R</sub> RM								
	V <sub>R</sub> WM	50	100	200	400	600	800	1000	V
	V <sub>D</sub> C								
RMS Reverse Voltage	V <sub>R</sub> MS	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T <sub>A</sub> =40°C	I <sub>O</sub>	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>F</sub> SM	80							A
Forward Voltage per element @I <sub>F</sub> =3.0A	V <sub>F</sub> M	1.1							V
Peak Reverse Current @T <sub>A</sub> =25°C At Rated DC Blocking Voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 500							uA
Typical Junction Capacitance per leg (Note 2)	C <sub>J</sub>	25							pF
Typical Thermal Resistance per leg	R <sub>θ</sub> JA	40							°C/W
	R <sub>θ</sub> JL	15							
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55to+150							°C

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

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

Fig. 1 Output Current Derating Curve

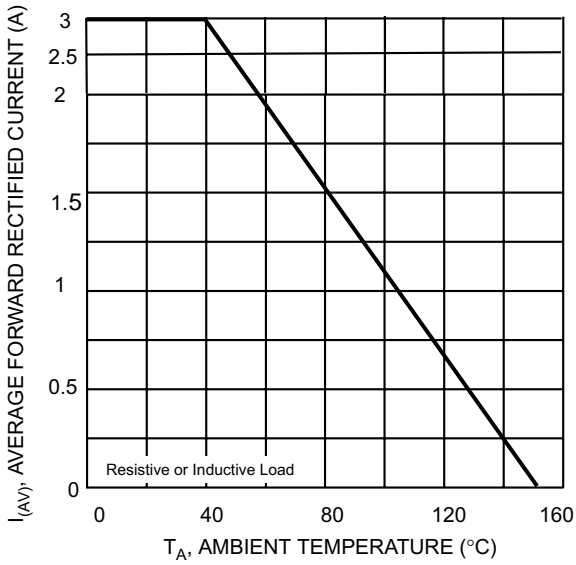


Fig. 2 Typical Forward Characteristics (per leg)

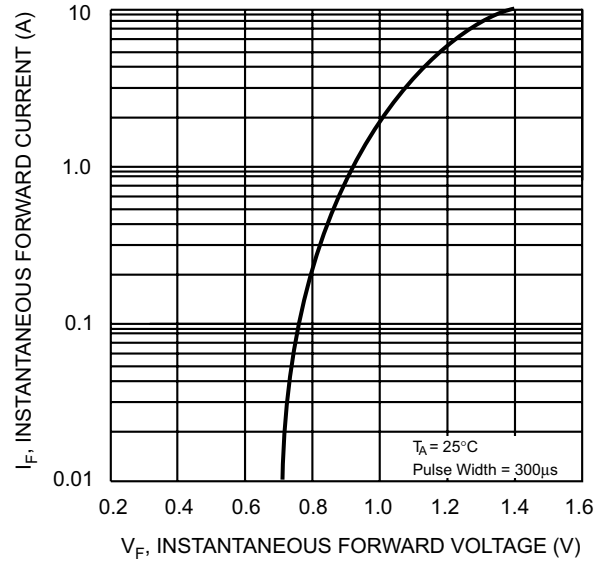


Fig. 3 Maximum Peak Forward Surge Current (per leg)

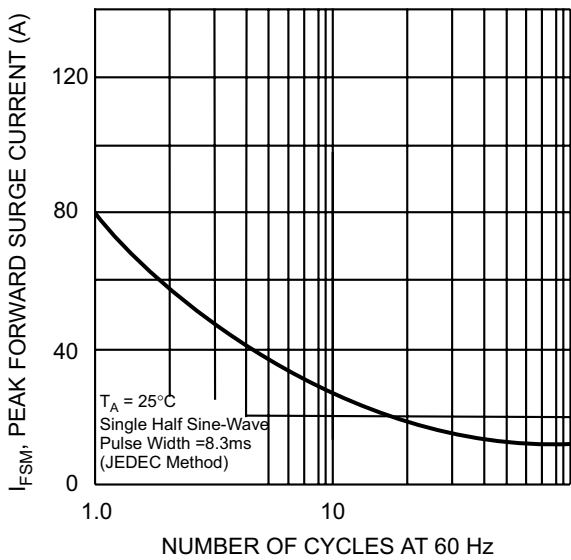


Fig. 4 Typical Reverse Characteristics (per element)

