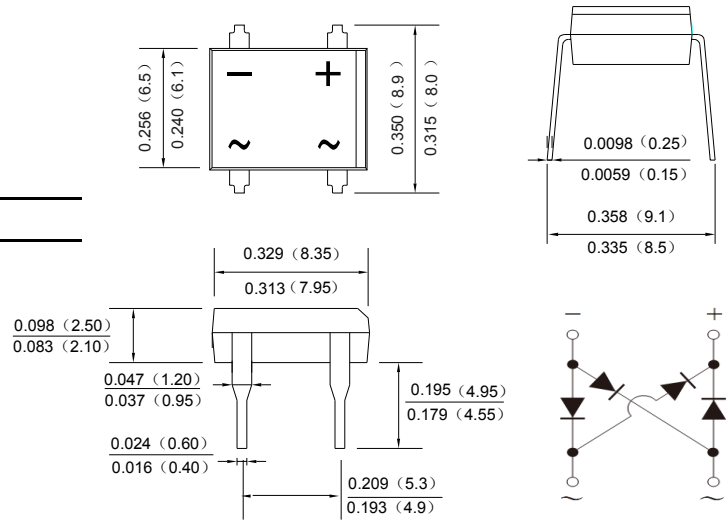


### Features

- 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)

### 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	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$								V
	$V_{RWM}$	50	100	200	400	600	800	1000	
	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@ $T_c=100^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	45							A
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	8.404							$\text{A}^2\text{s}$
Forward Voltage per element @ $I_F=1.0\text{A}$	$V_{FM}$	1.0							V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	5.0 200							$\mu\text{A}$
Typical Junction Capacitance per leg (Note 2)	$C_J$	25							pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	15							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							$^\circ\text{C}$

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

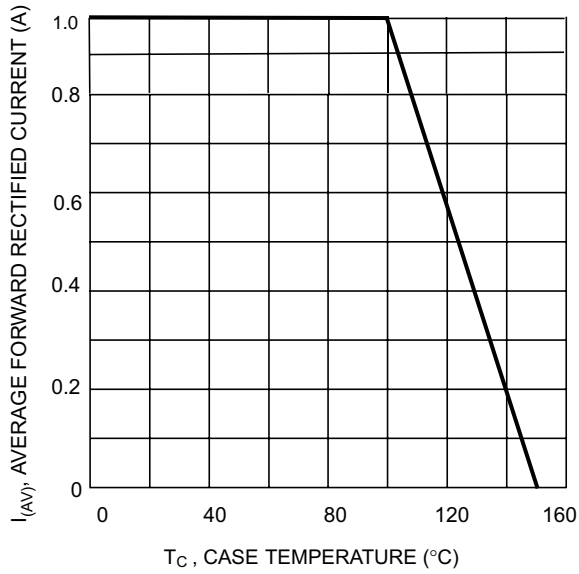


Fig. 2 Typical Forward Characteristics (per leg)

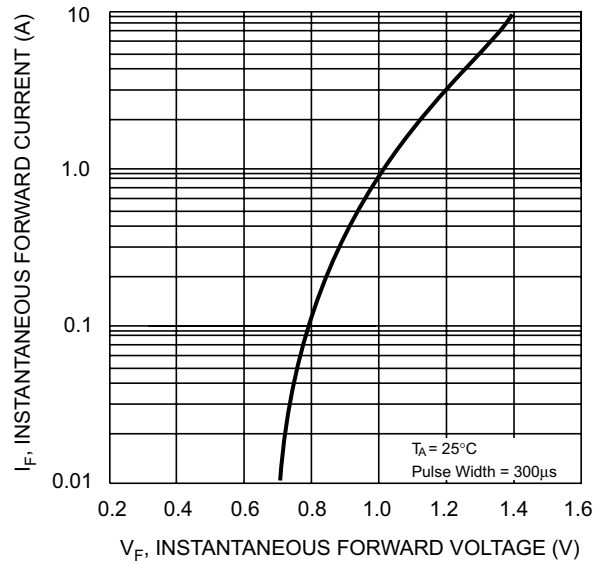


Fig. 3 Maximum Peak Forward Surge Current (per leg)

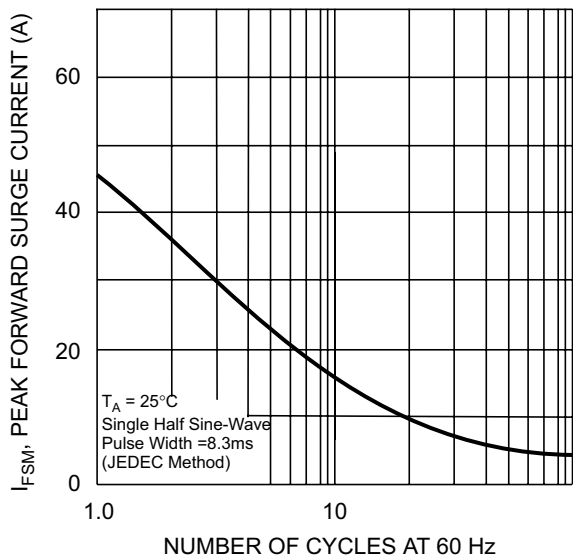
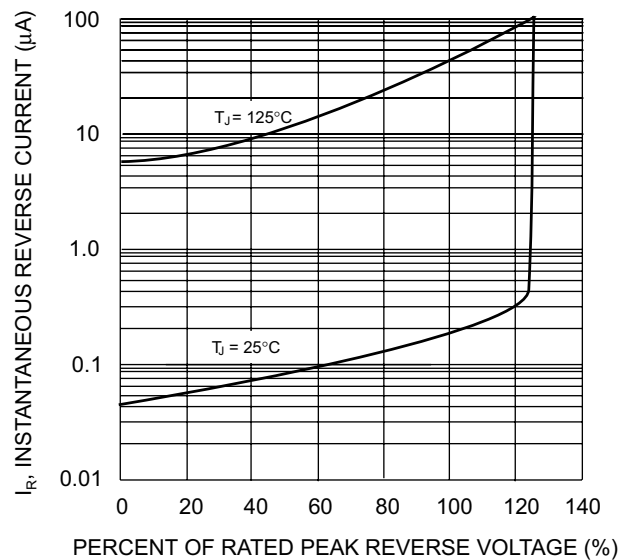


Fig. 4 Typical Reverse Characteristics (per element)



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