

# EDB101 THRU EDB105

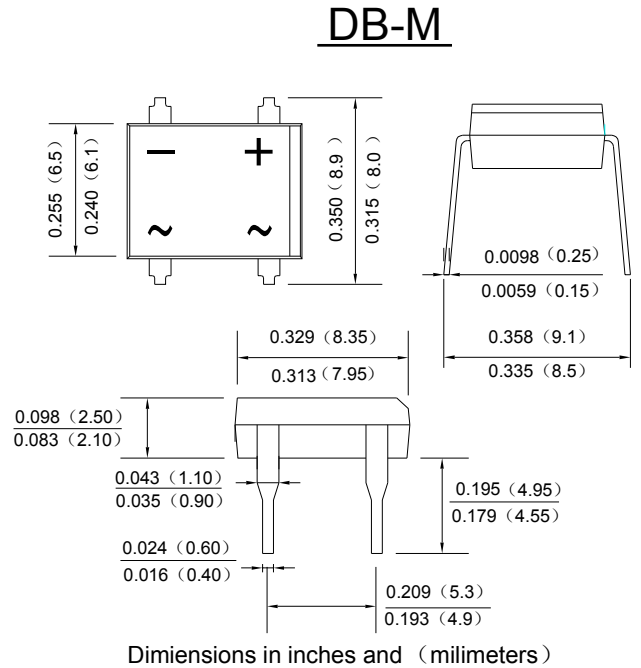
SINGLE PHASE 1.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

## Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- 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,



## 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	EDB101	EDB102	EDB103	EDB104	EDB105	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$	50	100	200	400	600	V
	$V_{RWM}$						
	$V_{DC}$						
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	V
Average Rectified Output Current (Note 1)@ $T_A=40^\circ C$	$I_o$	1.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50					A
Forward Voltage per element @ $I_F=1.0A$	$V_{FM}$	0.95			1.25	1.7	V
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$				5.0	500	$\mu A$
Maximum reverse recovery time (Note 3)	$T_{RR}$				35		ns
Typical Junction Capacitance per leg (Note 2)	$C_J$				13		pF
Typical Thermal Resistance per leg	$R_{\theta JA}$				70		$^\circ C/W$
	$R_{\theta JL}$				20		
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150					$^\circ C$

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

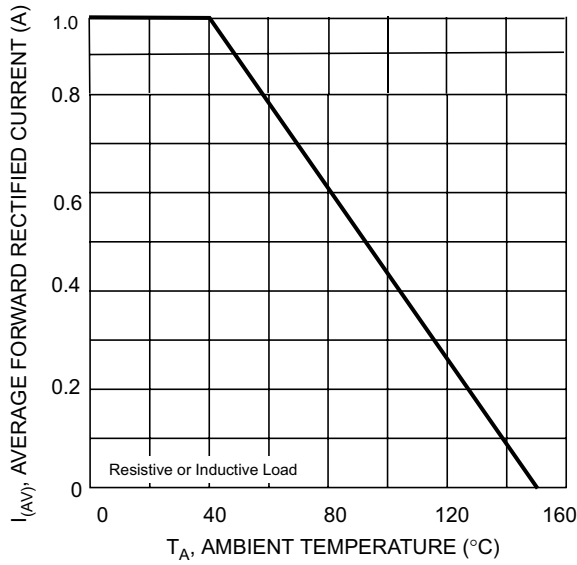


Fig. 2 Typical Forward Characteristics (per leg)

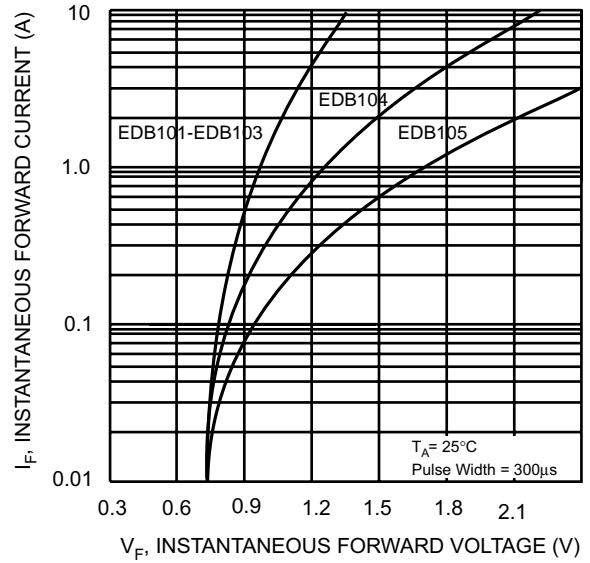


Fig. 3 Maximum Peak Forward Surge Current (per leg)

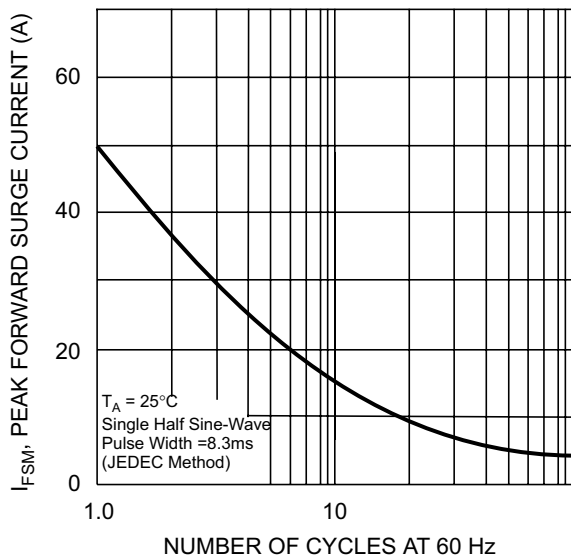


Fig. 4 Typical Reverse Characteristics (per element)

