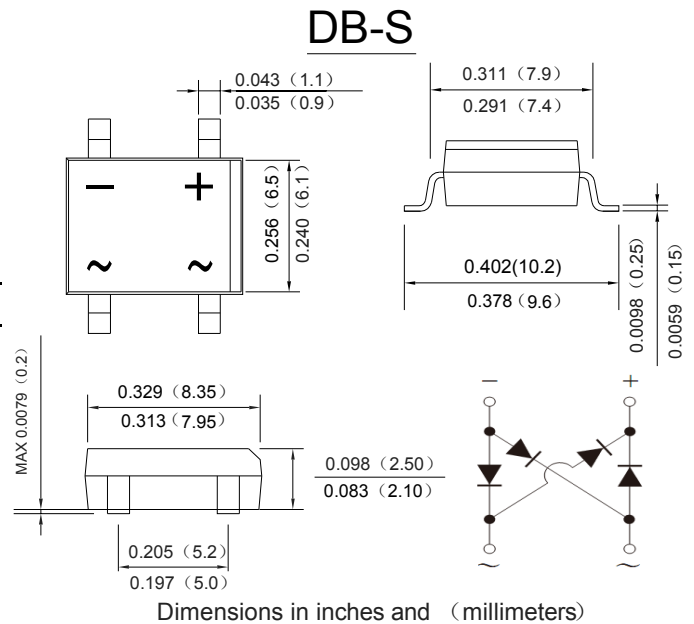


Features

- 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-S, 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	EDB101S	EDB102S	EDB103S	EDB104S	EDB105S	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)@ $T_c=100^\circ\text{C}$	$I_F(AV)$	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					A^2s
Forward Voltage per element @ $I_F=1.0\text{A}$	V_{FM}	0.95		1.25	1.7	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					μA
Maximum reverse recovery time	T_{RR}	35					ns
Typical Junction Capacitance per leg (Note 2)	C_J	13					pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	70					$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	20					
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150					$^\circ\text{C}$

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.

EDB101S THRU EDB105S

Fig. 1 Output Current Derating Curve

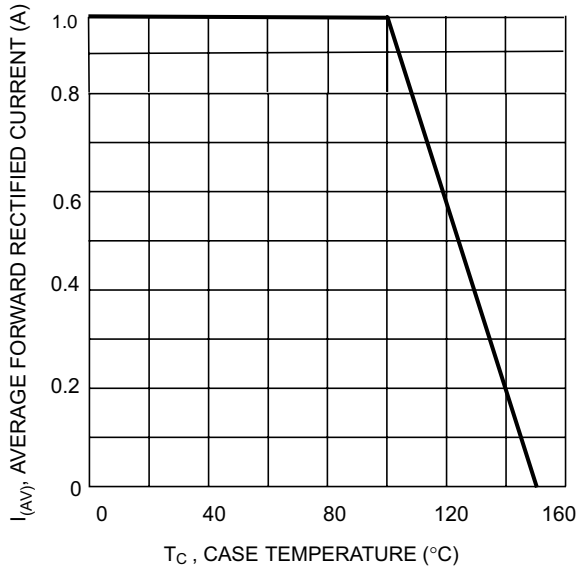


Fig. 2 Typical Forward Characteristics (per leg)

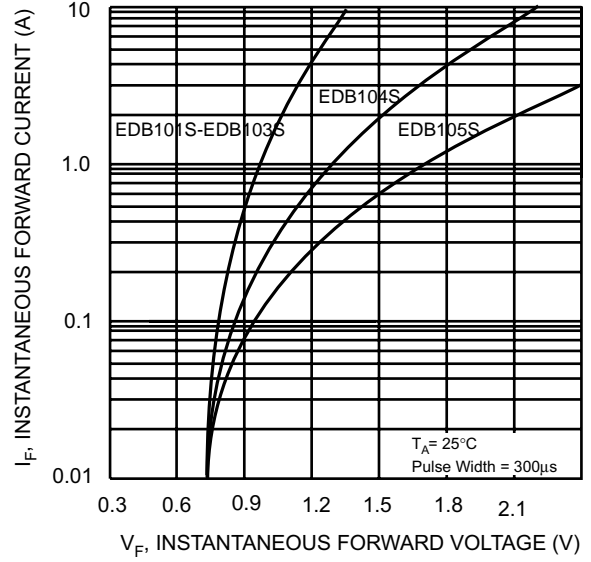


Fig. 3 Maximum Peak Forward Surge Current (per leg)

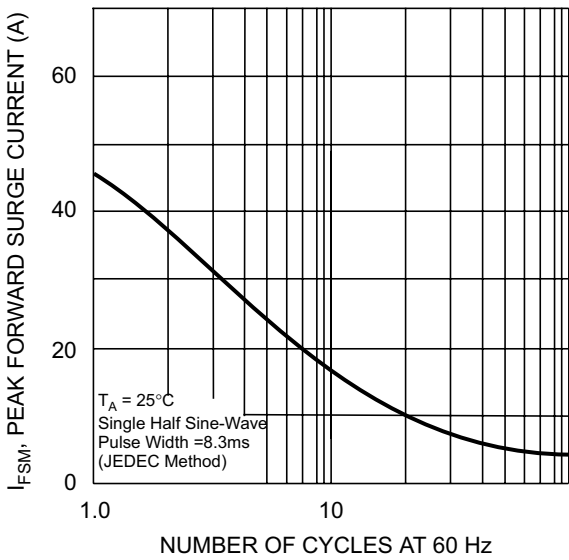


Fig. 4 Typical Reverse Characteristics (per element)

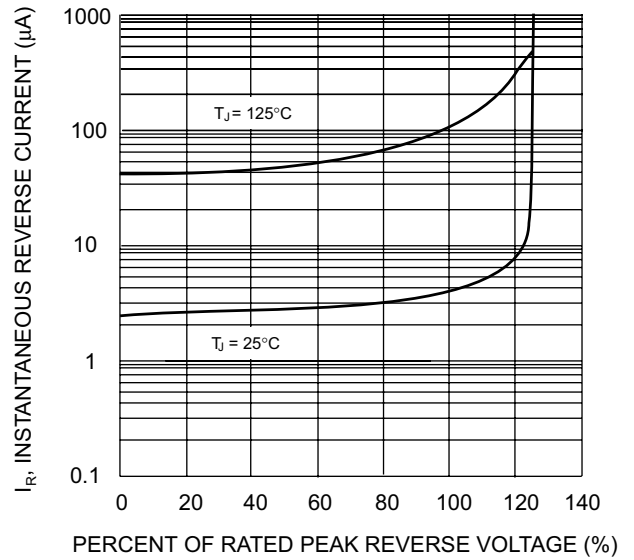
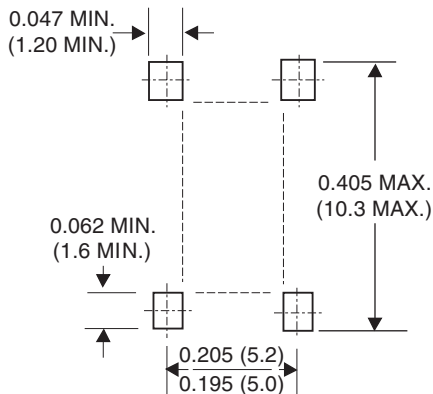


Fig. 5 Mounting Pad Layout



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