

EDB101 THRU EDB106

GLASS PASSIVATED SUPER FAST SILICON SURFACE MOUNT BRIDGE RECTIFIER VOLTAGE RANGE 50 to 400 Volts CURRENT 1.0 Ampere

FEATURES

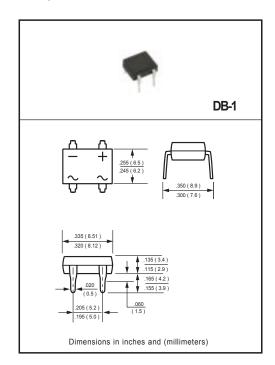
- * Good for automatic insertion
- * Surge overload rating 30 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 1.0 gram

MECHANICAL DATA

- * UL listed the recongnized component directory,file #94233 * Epoxy: Device has UL flammability classification 94V-O

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	EDB101	EDB102	EDB103	EDB104	EDB105	EDB106	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	Volts
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	105	140	210	280	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	Volts
Maximum Average Forward Output Current at T _A = 55°C	I ₀	1.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30						Amps
Typical Thermal Resistance (Note 3)	R _{θJA}	38						°C/W
	RøjL	12						
Typical Junction Capacitance (Note 2)	CJ	15 10				10	pF	
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150						°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	EDB101	EDB102	EDB103	EDB104	EDB105	EDB106	UNITS
Maximum Forward Voltage at 1.0A DC		V _F	1.05 1.35 1.70					1.70	Volts
Maximum Reverse Current at Rated	@T _A = 25°C	I_	5.0						μAmps
DC Blocking Voltage per element	@T _A = 100°C	IR	100						μAmps
Maximum Reverse Recovery Time (Note 1)		trr	50						nSec

Note: 1.Test Conditions: I_F=0.5A,I_R=-1.0A,I_{RR}=-0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0 volts. 3.Thermal Resistance : Mounted on PCB.

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RATING AND CHARACTERISTICS CURVES (EDB101 THRU EDB106)

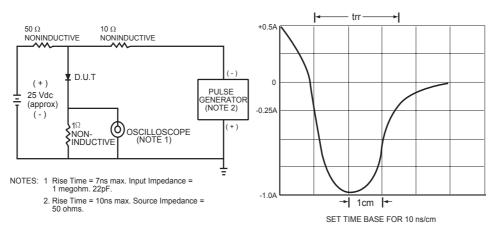
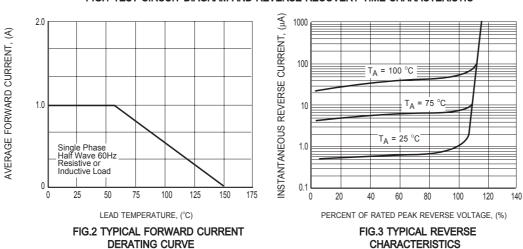
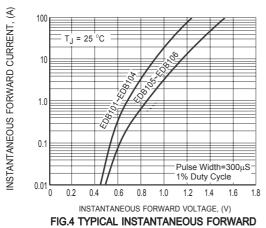
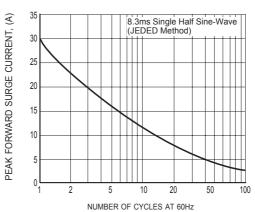


FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



RATING AND CHARACTERISTICS CURVES (EDB101 THRU EDB106)





CHARACTERISTICS

FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

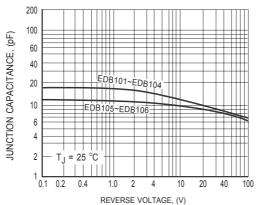


FIG.6 TYPICAL JUNCTION CAPACITANCE



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