

**GLASS PASSIVATED SUPER FAST
SILICON SURFACE MOUNT BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 600 Volts CURRENT 1.0 Ampere

FEATURES

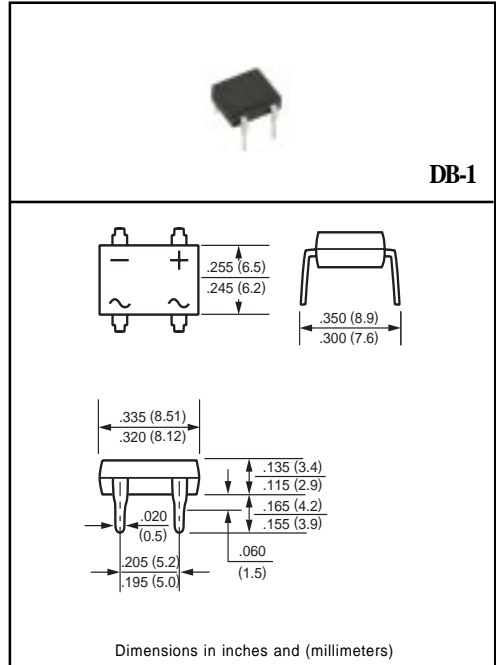
- * Good for automatic insertion
- * Surge overloading rating - 30 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 1.0 gram

MECHANICAL DATA

- * UL listed the recognized component directory, file #94233
- * Epoxy: Device has UL flammability classification 94V-0

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%.



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	EDB101	EDB102	EDB103	EDB104	EDB105	EDB106	EDB107	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS Volts	V _{RMS}	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	Volts
Maximum Average Forward Current at TA = 55°C	I _o	1.0						Amps	
Peak Forward Surge Current I _{FM} (surge):8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30						Amps	
Typical Junction Capacitance (Note 2)	C _J	15				10			pF
Typical Thermal Resistance (Note 3)	R _{θJA}	38						°C/W	
	R _{θJL}	12							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150						°C	

CHARACTERISTICS

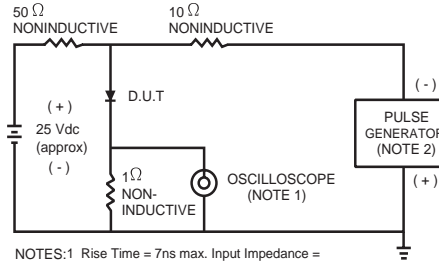
ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

	SYMBOL	EDB101	EDB102	EDB103	EDB104	EDB105	EDB106	EDB107	UNITS	
Maximum Forward Voltage at 1.0A DC	V _F	1.05				1.35			1.70	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@ TA = 25°C				5.0				uAmps
		@ TA =100°C				100				
Maximum Reverse Recovery Time (Note 1)	t _{rr}	50								nSec

- NOTES : 1.Test Conditions: IF=0.5A, IR=-1.0A, IRR=-0.25A.
2.Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3.Mounted on P.C.B.with 0.5x0.5" (13x13mm) copper pads.

RATING AND CHARACTERISTIC CURVES (EDB101 THRU EDB107)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1 Rise Time = 7ns max. Input Impedance = 1 megohm, 22pF.
 2. Rise Time = 10ns max. Source Impedance = 50 ohms.

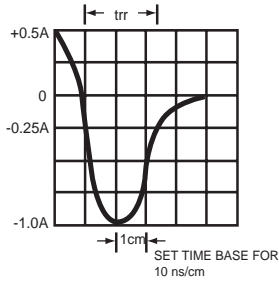


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

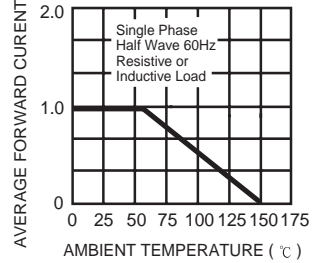


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

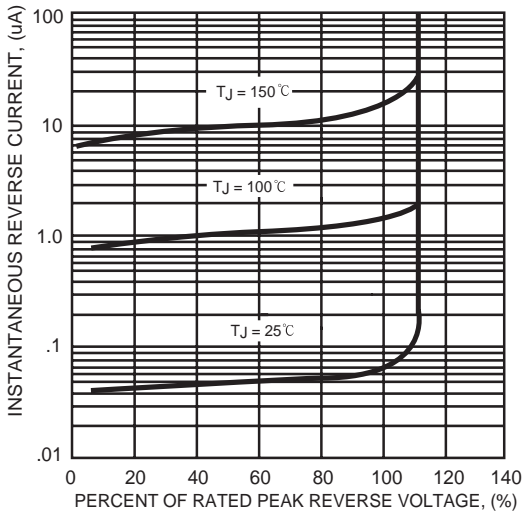


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

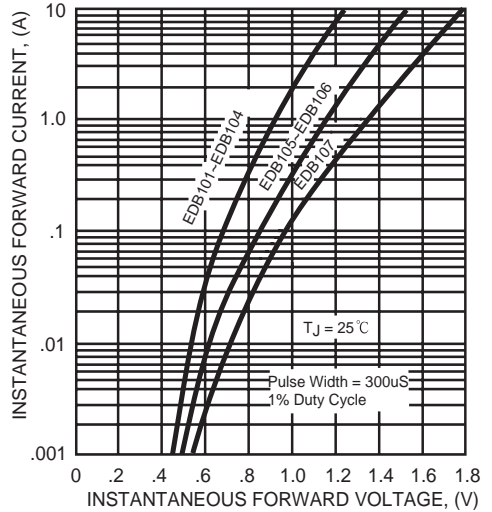


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

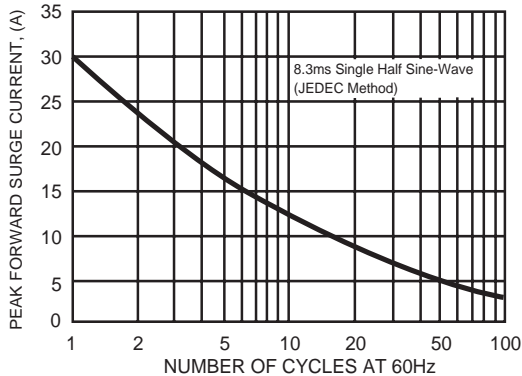


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

