THE DATASHEET OF

EDB104S

RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

EDB101S THRU EDB107S

GLASS PASSIVATED SUPER FAST SILICON SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 600 Volts CURRENT 1.0 Ampere

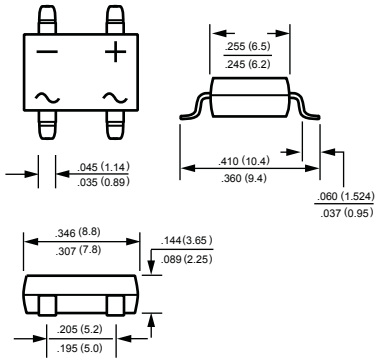
FEATURES

* Surge overload rating - 40 amperes peak
* Ideal for printed circuit board
* Reliable low cost construction utilizing molded
* Glass passivated device
* Polarity symbols molded on body
* Mounting position: Any

MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O

DB-S



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Resistive or inductive load.

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

RATINGS	SYMBOL	EDB101S	EDB102S	EDB103S	EDB104S	EDB105S	EDB106S	EDB107S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS Bridge Input Voltage	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 Output Current at T_A = 55°C	I_O	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 Current Square Time	I^2T	3.7							A^2S
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	38							°C/W
	$R_{\theta JL}$	12							
Typical Junction Capacitance (Note 2)	C_J	15				10			pF
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150							°C

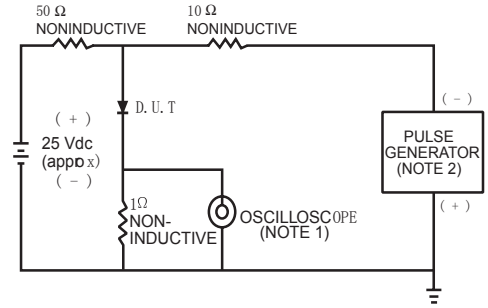
ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	EDB101S	EDB102S	EDB103S	EDB104S	EDB105S	EDB106S	EDB107S	UNITS
Maximum Forward Voltage at 1.0A DC		V_F	1.05				1.35		1.70	Volts
Maximum Reverse Current at Rated	@T_A = 25°C	I_R	5.0							µAmps
DC Blocking Voltage per element	@T_A = 100°C		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.

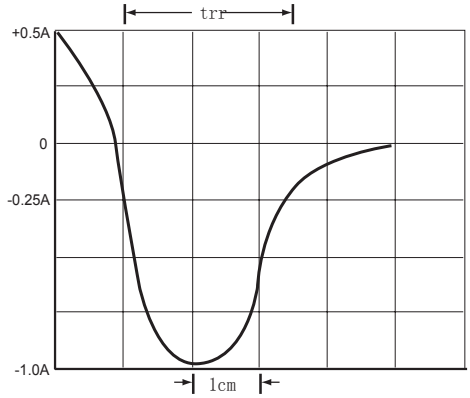
2022-09/97
REV:F

RATING AND CHARACTERISTICS CURVES (EDB101S THRU EDB107S)



NOTES: 1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF.

2. Rise Time = 10ns max. Source Impedance = 50 ohms.



SET TIME BASE FOR 10 ns/cm

FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

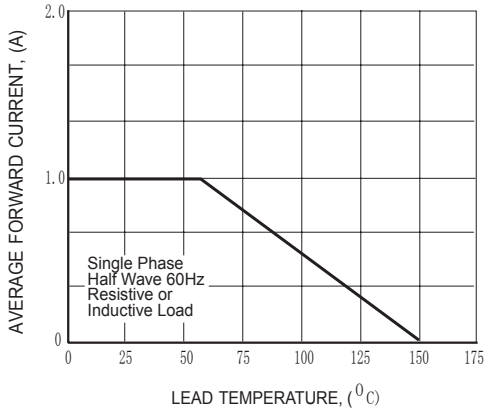


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

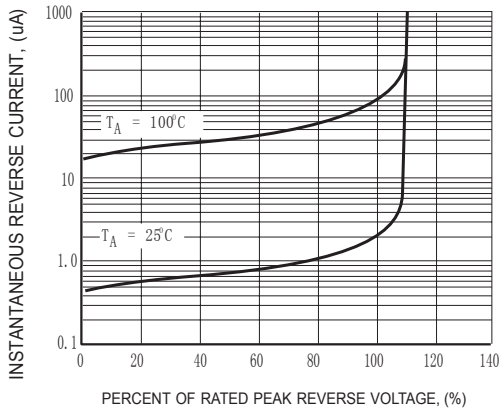


FIG.3 TYPICAL REVERSE CHARACTERISTICS

RATING AND CHARACTERISTICS CURVES (EDB101S THRU EDB107S)

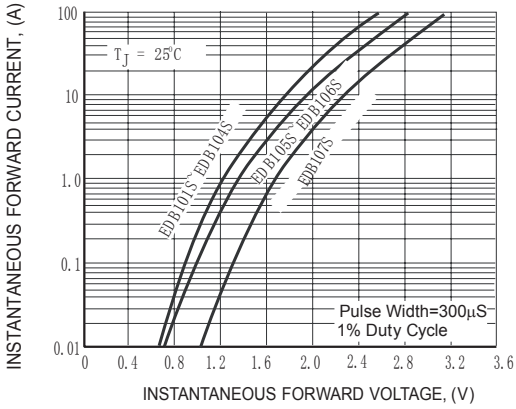


FIG. 4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

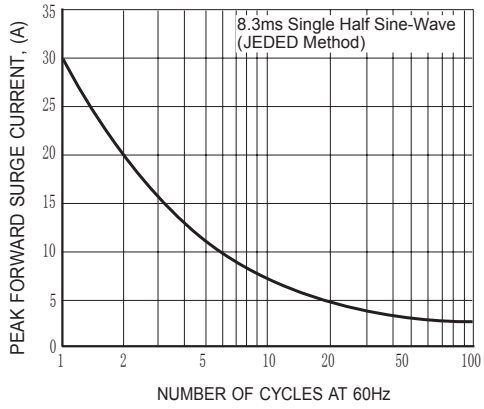


FIG. 5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

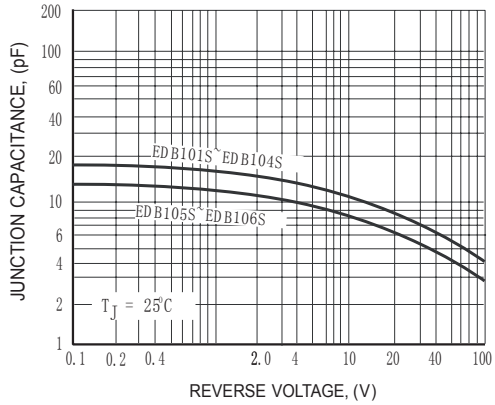
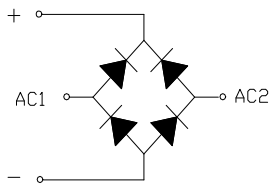


FIG. 6 TYPICAL JUNCTION CAPACITANCE

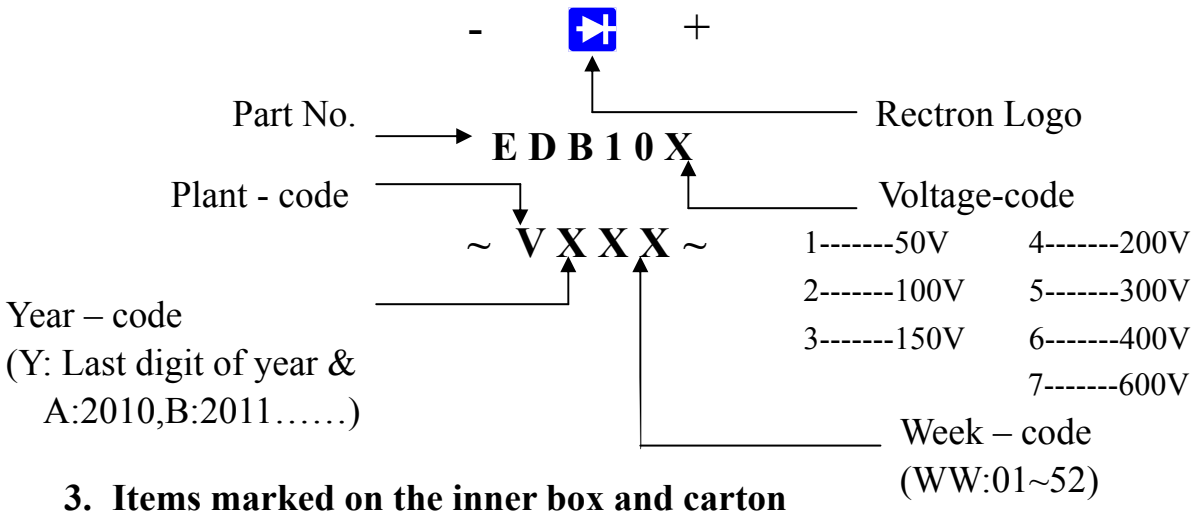
RECTRON

Attachment information about EDB10XS

1. Internal Circuit



2. Marking on the body



3. Items marked on the inner box and carton

3.1 On the box (for –B)

CUSTOMER
TYPE
LOT NO.
QUANTITY
Q.A.
DATE

3.2 On the carton

CUSTOMER
TYPE
QUANTITY
LOT NO.
REMARK

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DB-S	-T/W	1,000	1,000	9.5	52	330	360*355*360	8,000	9.8

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View EDB104S on WIN SOURCE
- Rectron USA Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management