

GLASS PASSIVATED BRIDGE RECTIFIERS

FEATURES

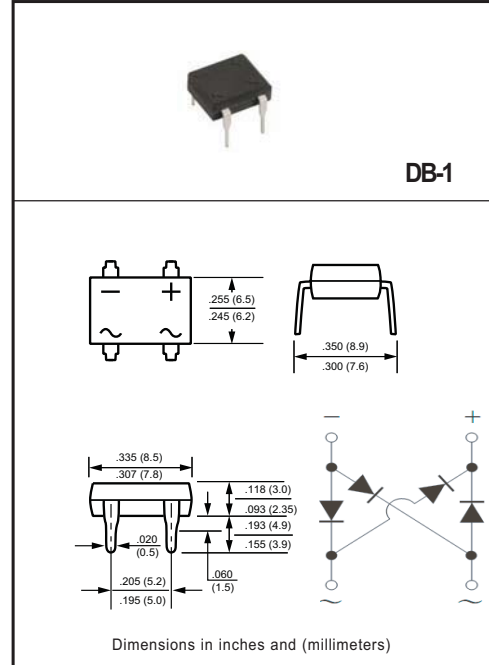
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded plastic technique
- * Mounting position: Any
- * Rating to 1000V PRV

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	DB301	DB302	DB303	DB304	DB305	DB306	DB307	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at $T_c = 100^\circ\text{C}$ (Note 1)	I_O	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80							Amps
Typical Current Squared Time	I^2T	26.56							A^2S
Typical Junction Capacitance per leg (Note 2)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	15							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	DB301	DB302	DB303	DB304	DB305	DB306	DB307	UNITS
Maximum Forward Voltage Drop per Bridge Element at 3.0A DC	V_F	1.0							Volts
Maximum Reverse Current at Rated	I_R	5.0							uAmps
DC Blocking Voltage per element		200							uAmps

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.

2021-07
REV:A

RATING AND CHARACTERISTICS CURVES (DB301 THRU DB307)

Fig. 1 Output Current Derating Curve

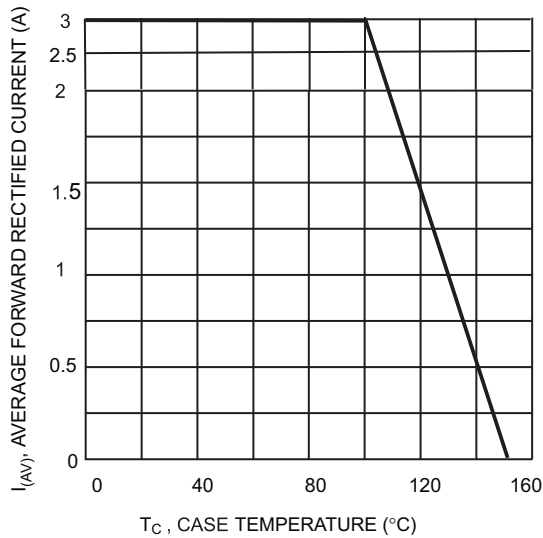


Fig. 2 Typical Forward Characteristics (per leg)

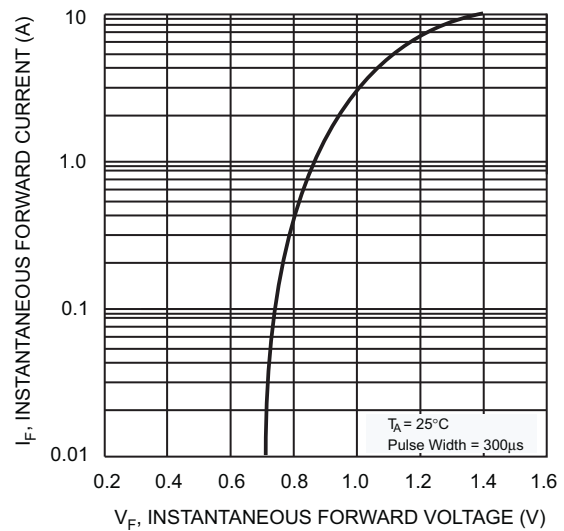


Fig. 3 Maximum Peak Forward Surge Current (per leg)

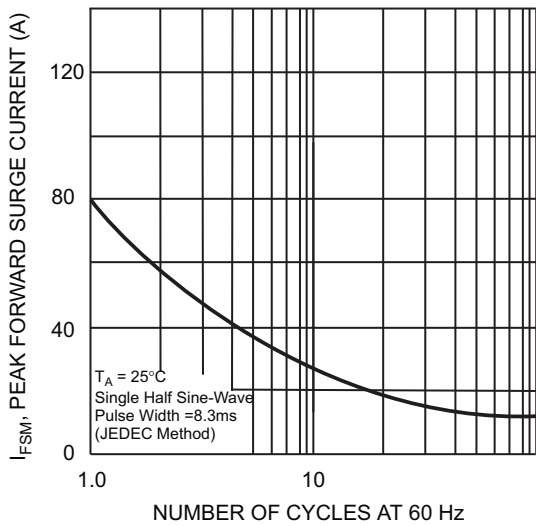
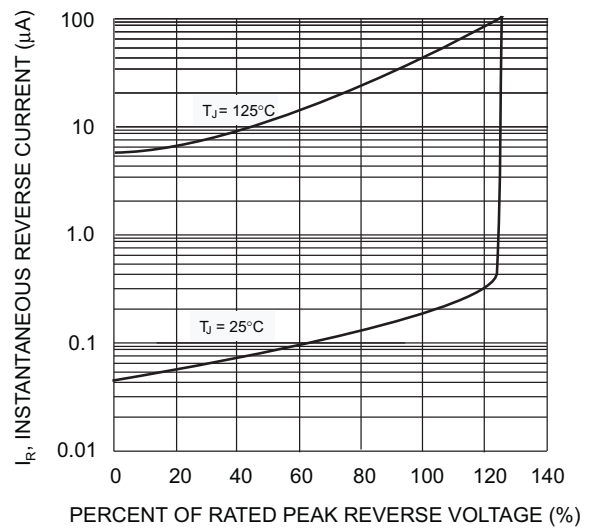


Fig. 4 Typical Reverse Characteristics (per element)

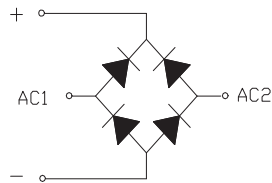




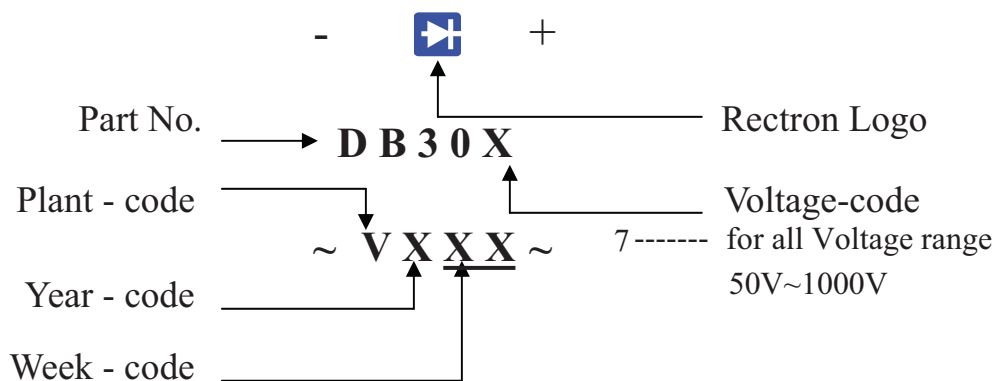
RECTRON

Attachment information about DB30X

1. Internal Circuit



2. Marking on the body



3. Items marked on the inner box and carton

3.1 On the box (for -C)

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

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
DB-1	-C	2,500	440*130*65	460*290*150	10,000	6.80

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