RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

DB101S THRU DB107S

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

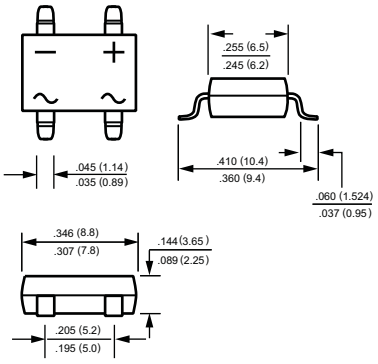
* Good for automation insertion
* Surge overload rating - 30 amperes peak
* Ideal for printed circuit board
* Reliable low cost construction utilizing molded
* Glass passivated device
* Polarity symbols molded on body
* Mounting position: Any

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	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	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_A = 40°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 Squarad Time	I^2t	3.73							A^2Sec
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							°C/W
	$R_{\theta JL}$	15							
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	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNITS
Maximum Forward Voltage Drop per chip (diode) at 1.0A DC		V_F	1.0							Volts
Maximum Reverse Current at Rated	@T_A = 25°C	I_R	1.0							uAmps
DC Blocking Voltage per element	@T_A = 125°C		0.05							mAmps

Note: 1." ROHS compliant".
2. Thermal Resistance: Mounted on PCB.

2022-09/97
REV:F

RATING AND CHARACTERISTICS CURVES (DB101S THRU DB107S)

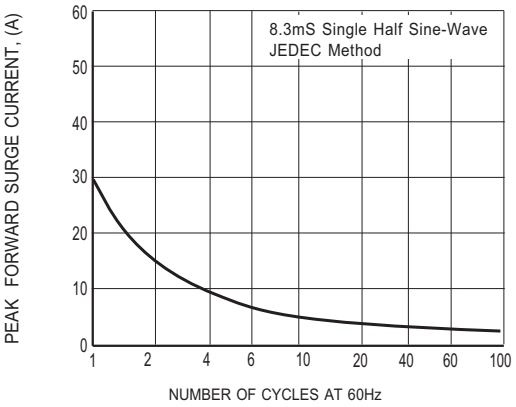


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

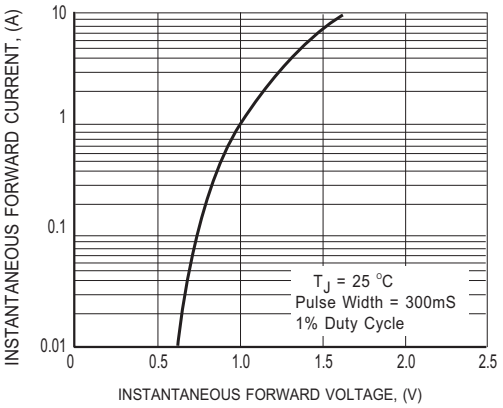


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

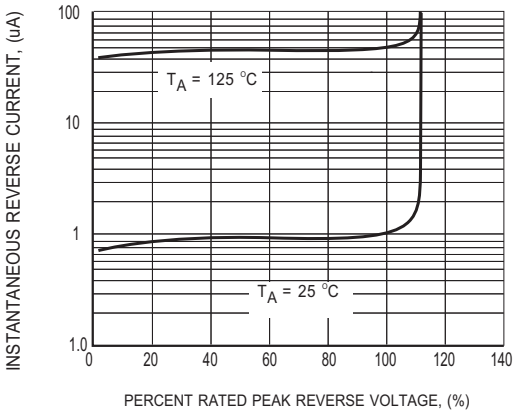


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

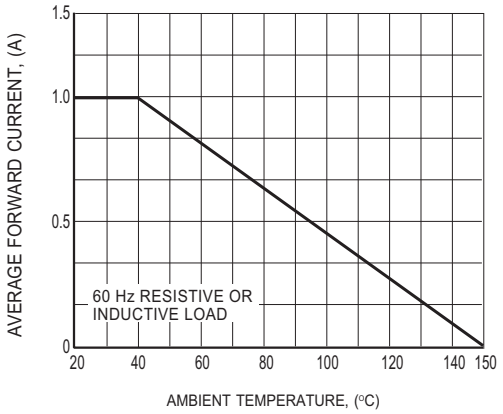
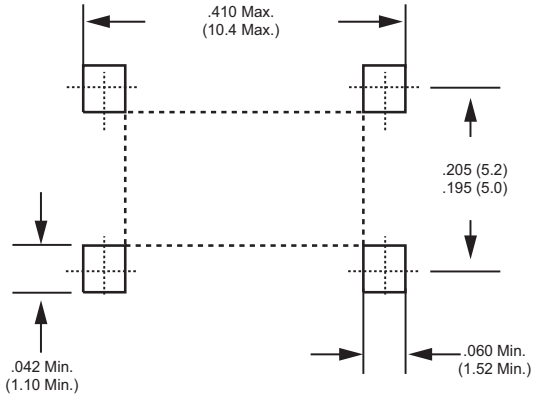


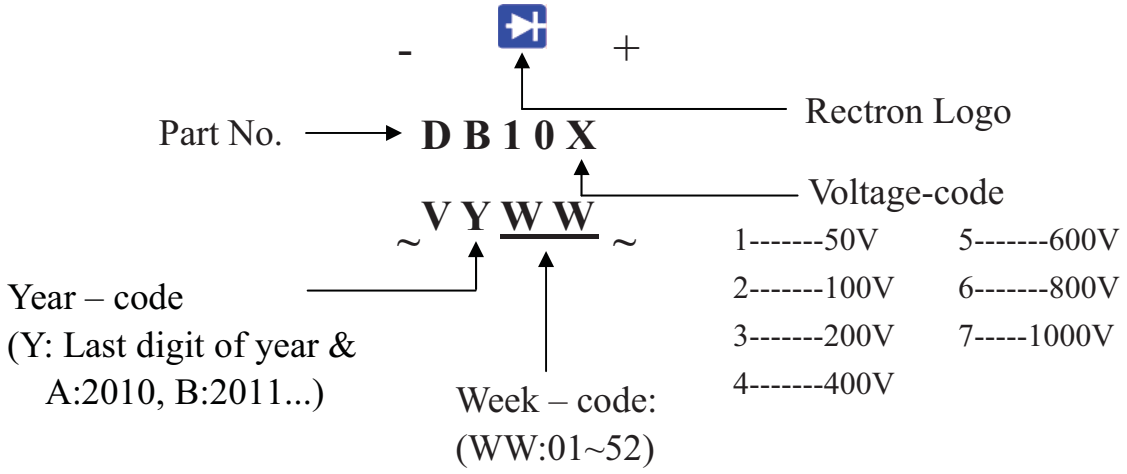
FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



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

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