

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 400 Volts CURRENT 10 Amperes

FEATURES

- * Surge overload rating: 200 amperes peak
- * Low forward voltage drop

MECHANICAL DATA

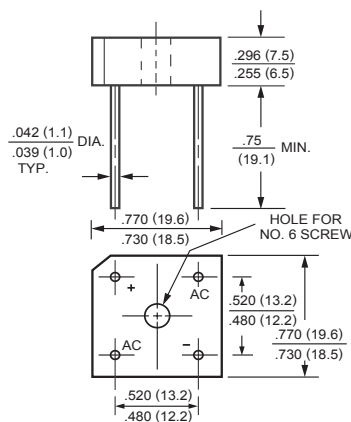
- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: Mil-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 7.86 grams
- * Mounting: Hole thru for # 6 screw

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%.



BR-10



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	BR104-B-D-A01	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	Volts
Maximum RMS Voltage	V_{RMS}	280	Volts
Maximum DC Blocking Voltage	V_{DC}	400	Volts
Maximum Average Forward $T_c = 50^\circ\text{C}$	I_o	10.0	Amps
Rectified Output Current at: $T_c = 100^\circ\text{C}$		6.0	
$T_A = 50^\circ\text{C}$		6.0	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200	Amps
Typical Thermal Resistance	$R_{\theta JA}$	28	$^\circ\text{C/W}$
Typical Thermal Resistance	$R_{\theta JC}$	6.5	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to + 150	$^\circ\text{C}$

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

CHARACTERISTICS	SYMBOL	BR104-B-D-A01	UNITS
Maximum Forward Voltage Drop per element at 5.0A DC	V_F	1.1	Volts
Maximum Reverse Current at Rated	I_R	5.0	uAmps
DC Blocking Voltage per element		0.2	mAmps

Note: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTIC CURVES (BR104-B-D-A01)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

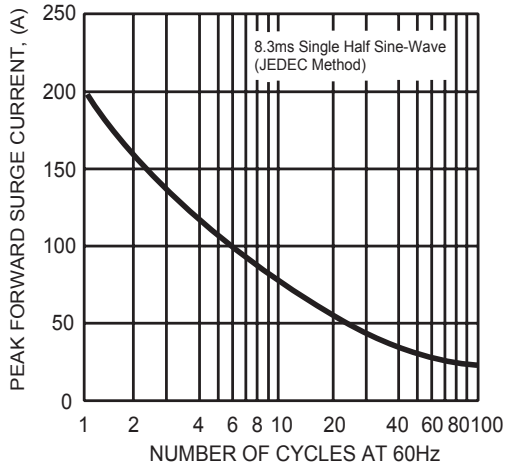


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

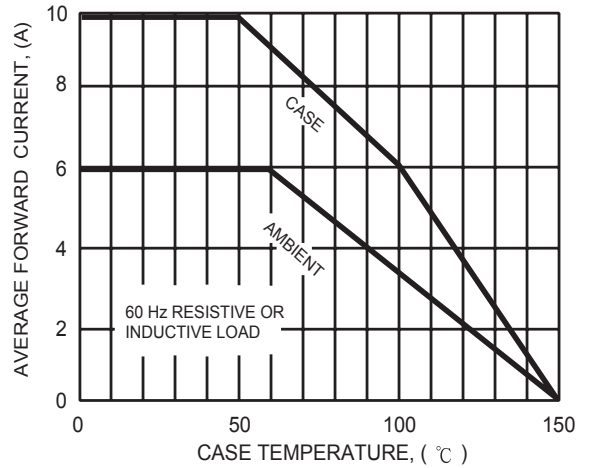


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

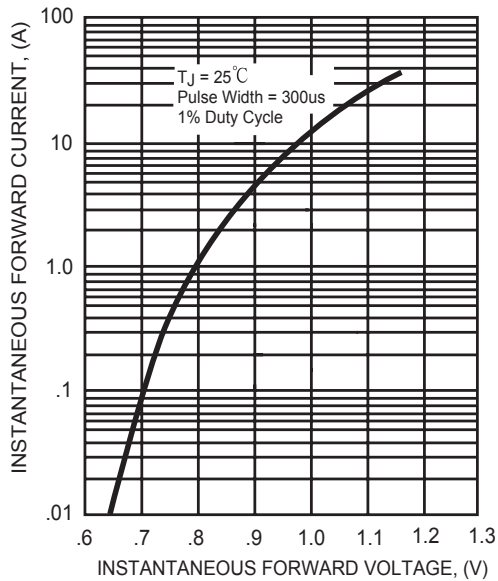
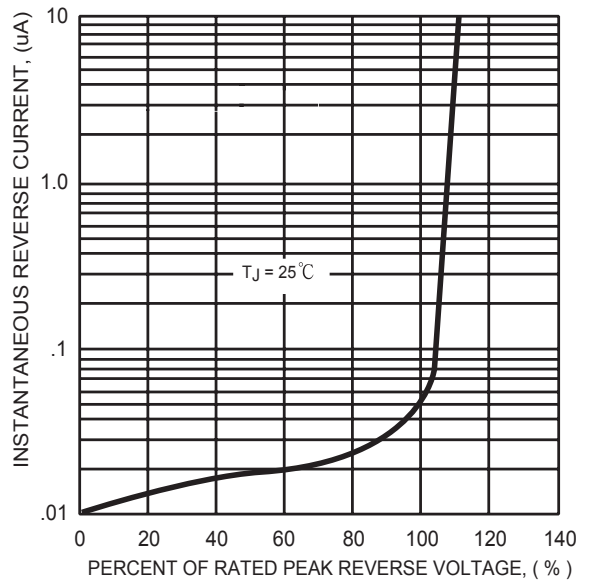


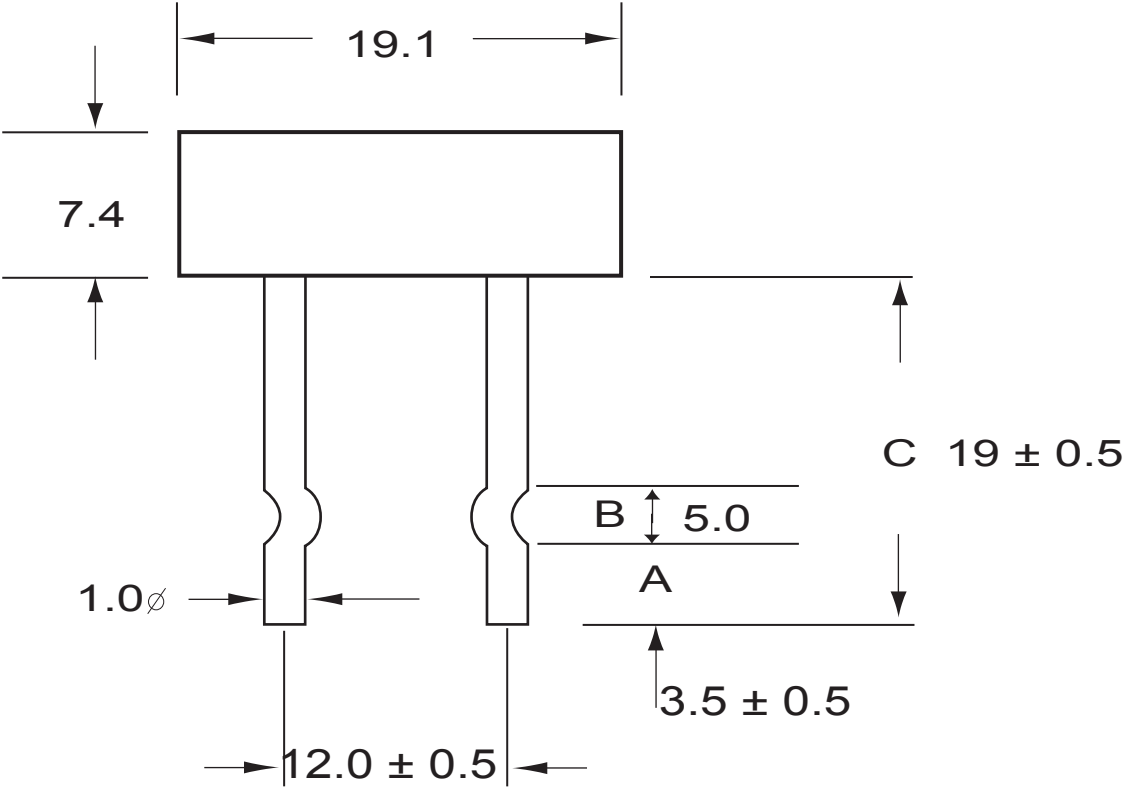
FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



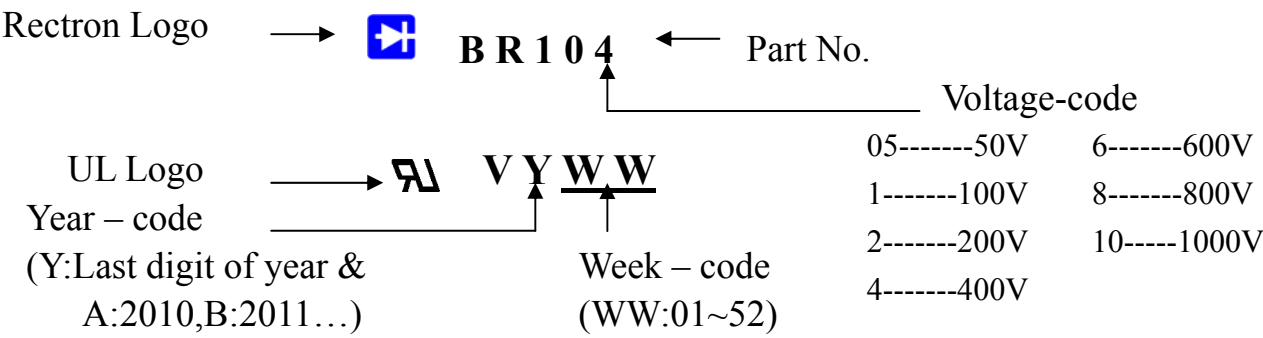
LEAD FORMING SPECIFICATIONS

BR-10

Unit: mm



Marking on the body



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
BR-10	-B	200	236*236*50	497*251*282	2,000	12.24

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.