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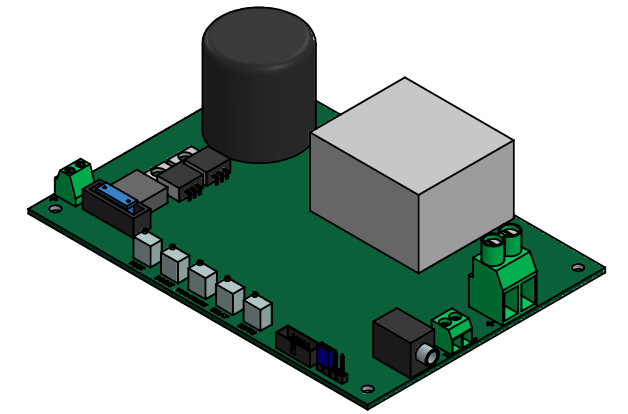
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**NOTES (UNLESS OTHERWISE SPECIFIED):**

1. All components and materials of this assembly or part must be certifiably ROHS compliant.
2. Control input does not filter out noise and requires clean TTL type signal with correct polarity
3. Connect shutter (+/-) to shutter power terminal on CX4000B shutter driver
4. Connect control (+/-) signal to shutter driver trigger terminals
  1. 5 V TTL recommended, input can support control signals up to 24 V (Eg: PLC OR SOLIDSTATE RELAY)
  2. Current path through 2.4kΩ limiting resistor with 1V drop across led (typically less than 2 mA at TTL voltages, or up to 10 mA from a 24 V PLC.)
5. Connect 24VDC (3A rated) power supply (+/-) to board power terminals
6. Select between digital and analog controller modes
  1. **Digital mode:** ensure jumper (4.2) is installed on left 2 pins
    1. Power on the CX4000B and apply a control signal to operate shutter
  2. **Analog mode:** remove jumper (4.2) before board power is applied
    1. Power on the CX4000B
    2. Adjust the trim potentiometers for left to right: current ramp up time, boost pulse time, hold current, brake delay time, & brake pulse time. Values are pre-set by the supplier.
    3. Note 1: delay, & brake functions are not used for some shutters and should be zeroed out
    4. Note 2: the current ramp time provides the shutter with a "soft start" and may be used to for noise and shock damping
    5. Note 3: values set in manual mode via the trim pots are not saved to the microcontroller and the board will revert to digital mode programmed values once the Jumper is reinstalled. Switching between modes requires the board to be **completely** powered down.

REVISIONS				
ECO#	REV.	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE	6/23/2020	M.K.



SCALE 1 : 2

D

D

C

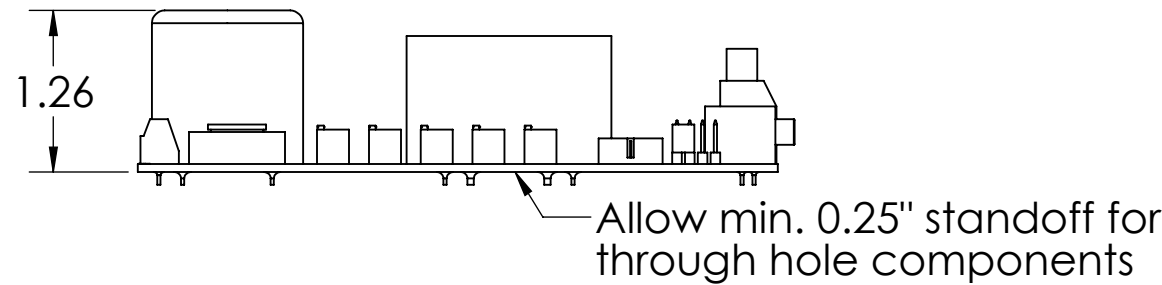
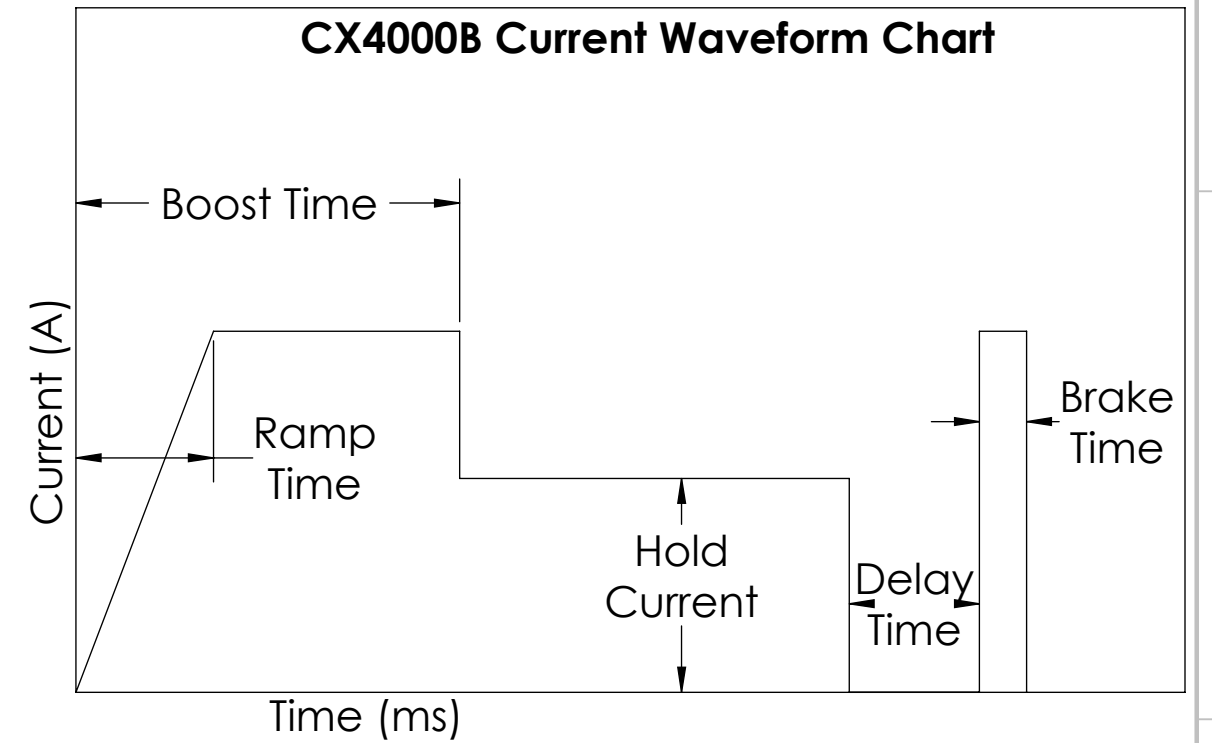
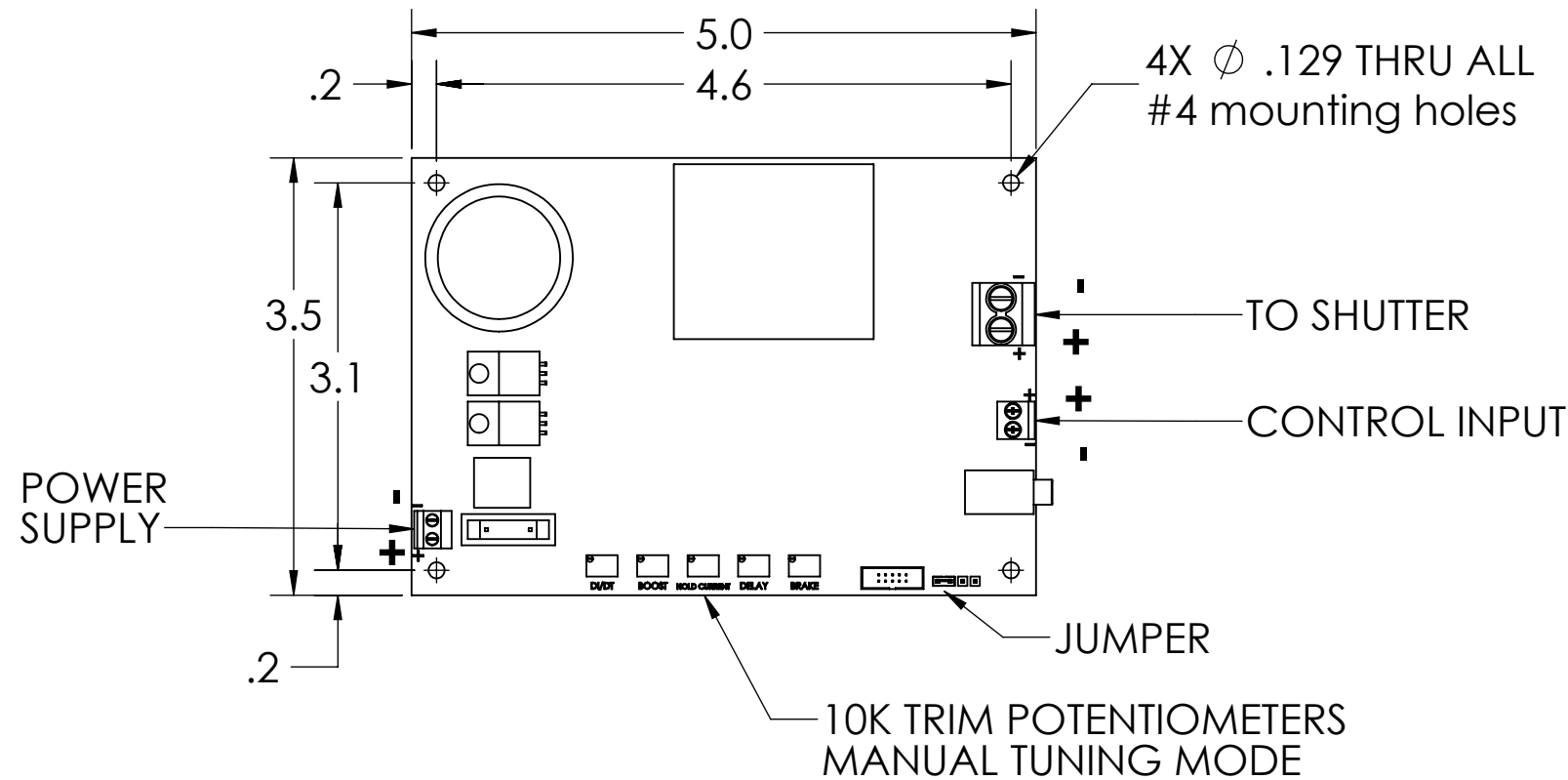
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A



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	
DIMENSIONS ARE IN INCHES		DRAWN	B.L.	
TOLERANCES:		CHECKED		
ANGULAR: ±1°		ENG APPR.		
ONE DECIMAL: X.X ±.1		MFG APPR.		
TWO DECIMAL: X.XX ±.015		Q.A.		
THREE DECIMAL: X.XXX ±.005		3RD ANGLE PROJECTION		
OVERALL FINISH:				TITLE:
N/A				CONTROLLER, SHUTTER DRIVER, CX4000
MATERIAL:				SIZE DWG. NO. REV
DO NOT SCALE DRAWING				<b>B</b> CX4000B <b>A</b>
				SCALE: 2:3 SHEET 1 OF 1

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