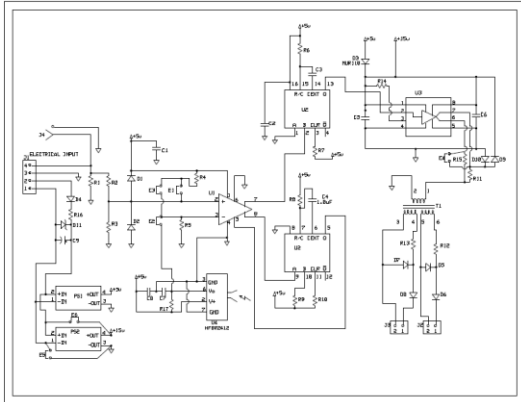


Model EA0038 Solid State Switch Trigger Circuit



The Model EA0038A is designed to provide two parallel isolated outputs of 5A suitable for triggering our line of solid state switches, such as the Models S25, S33, S34, and S38. There are multiple trigger and power input options.

This trigger circuit consists of a discriminator section, a driver section, and an isolation section. The discriminator section limits the effects of external electronic noise and also limits the pulse frequency to 200Hz. The driver section can provide up to 14A at 15V. The isolation section provides two parallel isolated outputs and can be used in series to get 5A at 30V or in parallel to get 10A at 15V.

Options

Power Input 1	<ul style="list-style-type: none"> • 24VDC (default) • 12VDC • 15VDC
Trigger Input	<ul style="list-style-type: none"> • TTL via BNC (default) • Fiber Optic (HFBR2521 Receiver) • Other Electrical Trigger Signal via BNC or 4 Pin Molex
Trigger Output	<ul style="list-style-type: none"> • Dual Parallel, Isolated, with 3.3Ω (default) • Series Connected, Isolated, with 3.3Ω • Dual Parallel, no Isolation, with 3.3Ω • Single, no Isolation

Note 1: External Power Supply Must Be Regulated

Silicon Power also provides a variety of solid state switch products and complete pulsed power systems. Contact sales@appliedpulsedpower.com for information.

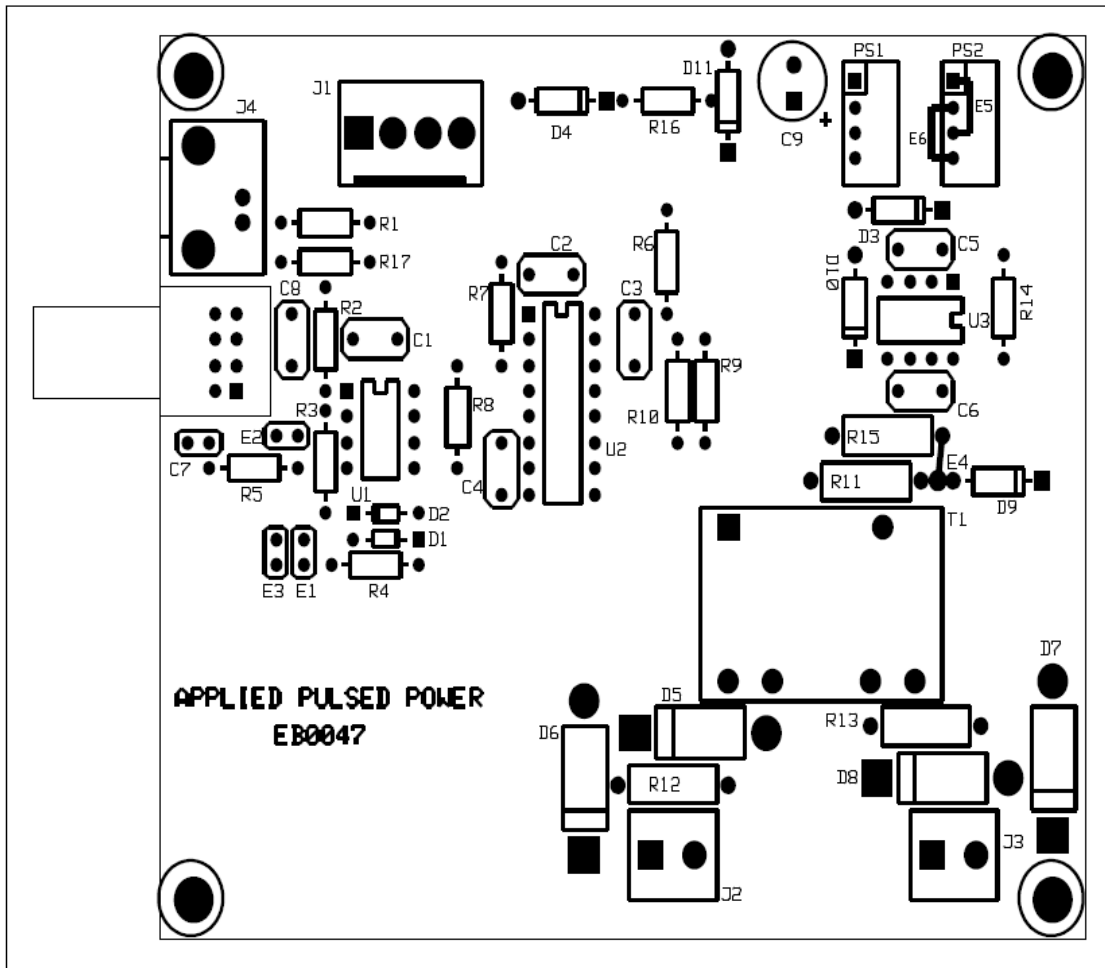


Figure 1: Model EA0038 Circuit Board Layout

Figure 1 shows the layout of the connections for the default configuration of the EB0038 circuit board. The 24VDC is provided to pins 1 (ground) and 2 (+24VDC) of J1. No connection should be made to pins 3 and 4 of J1. J2 and J3 are the outputs with pin1 being gate and pin 2 being gate return. J2 and J3 are electrically isolated. J2 and J3 can be externally connected in series or in parallel to increase the voltage or current of the output for a single device. J4 is the BNC trigger input. A 5V logic level is required to trigger the circuit.

Board Dimensions: 4.2"x3.5"

The four mounting holes are located 0.125" from the edges.