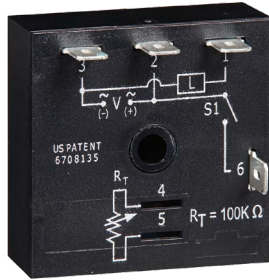
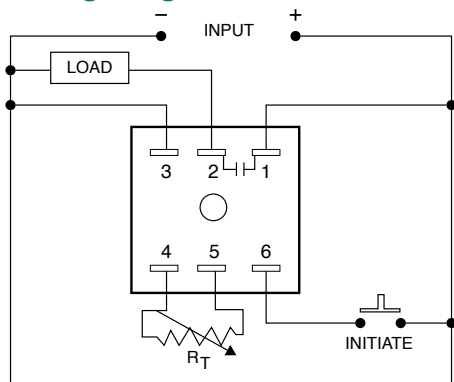


# TSD94110SB

## Retriggerable Single-Shot Timer



### Wiring Diagram



NOTE:  $R_T$  is used when external adjustment is ordered.

### Description

The TSD94110SB retriggerable single-shot timer is designed for a variety of applications. Its digital circuit provides long or short delays with accuracy and stability over a wide voltage and temperature range. It is the ideal timer for pulse-train monitoring of programmable controllers, or any system requiring motion detection.

#### Operation A Type

Power must be applied to input at all times prior to and during timing. Upon closure of initiate switch (momentary or maintained) the load is energized and the time delay is started. On completion of the delay period the load is de-energized. Should the initiate switch be reclosed during timing, the delay will be reset to zero and restarted.

#### Operation B Type

Upon application of input power, the load is energized and a time delay is started. At the end of the time delay, the load is de-energized. Should the initiate switch be closed or reclosed during timing, the delay is reset to zero and restarted.

### Features & Benefits

- Excellent Pulse Train Monitor
- Totally Solid State and Encapsulated
- Microcontroller Circuitry
- Fast Reset to Zero During Timing
- Excellent Accuracy and Reliability
- DC Units are Reverse Polarity Protected

### Specifications

#### Time Delay

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| Type                           | Microcontroller circuitry                        |
| Range                          | Factory fixed 10s                                |
| Repeat Accuracy                | ±0.5%                                            |
| Tolerance                      |                                                  |
| (Factory Calibration)          | ±1%                                              |
| Recycle Time                   | 300ms max.                                       |
| Time Delay vs. Temp. & Voltage | ±2%                                              |
| Initiate Timing                | 16ms max. AC                                     |
| Input                          |                                                  |
| Operating Voltage              | 120 volts AC                                     |
| Tolerance                      | ±15%                                             |
| Output                         |                                                  |
| Type                           | Solid State                                      |
| Form                           | Normally open                                    |
| Rating                         | 1 ampere steady state, 10 amperes inrush at 55°C |

Voltage Drop AC 2.5 volts typical at 1 ampere

#### Protection

|                       |                         |
|-----------------------|-------------------------|
| Transient             | Protected               |
| Dielectric            | 1500 volts RMS          |
| Insulation Resistance | 100 megohms minimum 4.4 |

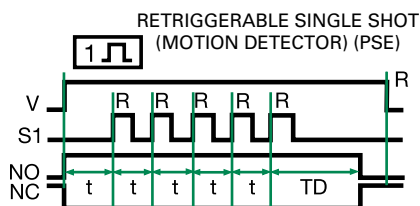
#### Mechanical

|             |                                                            |
|-------------|------------------------------------------------------------|
| Mounting    | Surface mount with one #8 or #10 screw                     |
| Termination | 0.25 in. (6.35 mm) male quick connect terminals            |
| Package     | Molded housing with encapsulated circuitry                 |
| Dimensions  | H 50.80 mm (2.00"); W 50.80 mm (2.00"); D 30.70 mm (1.21") |

#### Environmental

|                               |                               |
|-------------------------------|-------------------------------|
| Operating/Storage Temperature | -40°C to 60°C / -40°C to 85°C |
| Humidity                      | 95% relative, non-condensing  |
| Weight                        | Approx. 2.4 oz (68 g)         |

### Function Diagram



V = Voltage  
S1 = Initiate Switch  
NO = Normally Open Contact  
NC = Normally Closed Contact  
t = Incomplete Time Delay  
TD = Time Delay  
R = Reset