

# TIMING MODULE

COOL DOWN TIMER

ENCAPSULATED

**UL** **CS**  
E75633 LR46938

ONE AMPERE LOAD RATING

## Series 602S - OFF DELAY

FULLY SOLID STATE

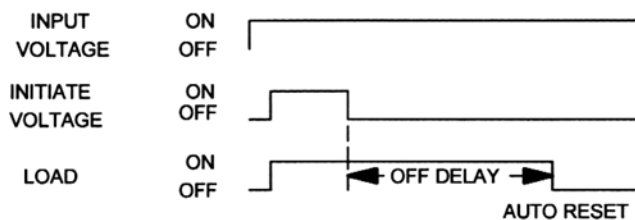
CMOS DIGITAL CIRCUITRY

- Life Expectancy –unlimited
- Environment Protected
- Tamper Proof
- No False Operate
- Small Size – 2"x 2" x 53/64"
- Lightweight – approximately 2.5 oz.
- Rugged

Input power is applied continuously. Upon application of voltage to the INITIATE VOLTAGE terminals the solid state load switch will turn ON, energizing the load. This condition is maintained for as long as the INITIATE VOLTAGE is applied. Removing the INITIATE VOLTAGE starts the preset delay period. At the end of the preset delay period the solid state load switch turns OFF, de-energizing the load. A new cycle of operation can then be started with application of voltage to the INITIATE VOLTAGE terminals. Should the INITIATE VOLTAGE be re-applied during the preset delay period, timing will stop, but the load will remain energized. When the INITIATE VOLTAGE is removed, the preset delay period will be re-triggered. When the delay has reached time out the load will be de-energized, and the timer will reset. This timer is commonly referred to as the "COOL DOWN TIMER".

Control the timing of valves, SFHP motors, lamps, relays, magnetic line starters, and actuators rated less than 1 ampere (10 amps inrush). CMOS digital circuitry, with solid state output switching. P/C boards and internal components are encapsulated in a flame retardant molded housing, fitted with quick connect wiring terminals. Available in all standard voltages and frequencies. Fixed or adjustable timing from .1 seconds to 24 hours.

### TIMING DIAGRAM



### SPECIFICATIONS

1. Repeat Accuracy:  $\pm 0.1\%$  or 16 ms. Whichever is greater
2. Combined Effect of Temperature and Voltage upon Repeat Accuracy:  $\pm 1\%$
3. Reset Time: 150 ms.
4. Operating Voltage Tolerance:  $\pm 20\%$
5. Load Current: Steady State – 8 ma. Min., 1 Ampere Max.
6. Voltage Drop: 1.5V Typical at 1 Ampere
7. Leakage Current: 5 ma.
8. Dielectric Strength: 1500 VRMS
9. Insulation Resistance: 100 Megohms Min.
10. Input Transient Protection: 3000V 120V UNITS, 6000V 240V units
11. Temperature Ambients: Operating -40°C to +70°C, Storage -55°C to +70°C
12. Humidity-Operating: 95% Relative
13. Linearity(Option A or D):  $\pm 5\%$  Minimum from 10% to 90% of range
14. Timing Tolerance:  $\pm 9\%$  + Tolerance of Rt Std.,  $\pm 5\%$  Special (Fixed)

### HOW TO ORDER 602S – (T) (V) (P)

SERIES	(T) = TIME RANGE	(V) = VOLTAGE	(S) = INITIATE	(P) = OPTIONS
602S	P = 0.1 - 5 SEC. 1 = 0.1 - 10 SEC. L = 0.2 - 20 SEC. J = 0.3 - 30 SEC. M = 0.6 - 60 SEC. 2 = 1 - 100 SEC. K = 1.2 - 120 SEC. F = 2 - 180 SEC. E = 3 - 300 SEC. 3 = 10 - 1000 SEC. 4 = 0.1 - 10 MIN. G = 0.3 - 30 MIN. H = 0.6 - 60 MIN. 5 = 1 - 100 MIN. V = 3 - 300 MIN. 6 = 10 - 1000 MIN. D = 1 - 24 HRS.	1 = 12VDC 2 = 24VDC 3 = 48VDC 4 = 24VAC 5 = 120VAC 6 = 240VAC	1 = 12VDC 2 = 24VDC 3 = 48VDC 4 = 24VAC 5 = 120VAC 6 = 240VAC	O - CUSTOMER SUPPLIES OWN POTENTIOMETER OR RESISTOR A - POTENTIOMETER SUPPLIED AS LOOSE PART *B - EXTERNALLY INSTALLED RESISTOR *C - FACTORY FIXED INTERNAL D - TRIMMER POTENTIOMETER INSTALLED ON TERMINALS R - INTERNAL POTENTIOMETER WITH THRU SHAFT S - INTERNAL POTENTIOMETER WITH SCREWDRIVER SLOT  <div style="border: 1px solid black; padding: 5px; text-align: center;"> <i>* For Fixed Time Specify The Value In Seconds, Minutes, Or Hours</i> </div>

**MADE IN USA**

**EXAMPLE P/N: 602S-354C/240S** This is an OFF DELAY 1A Rated Solid State Timer with a 240 second DELAY and an INPUT VOLTAGE of 120 VAC. The INITIATE voltage is 24 VAC. The DELAY is FACTORY FIXED INTERNAL calibration.

American Control Products / Precision Timer  
a division of Prime Technology  
344 Twin Lakes Road  
North Branford, CT 06471  
Telephone: (203) 481-5721  
Fax: (203) 481-8937  
Email: sales@primetechnology.com  
www.primetechnology.com



### TECHNICAL BULLETIN

### SOLID STATE TIMING MODULE

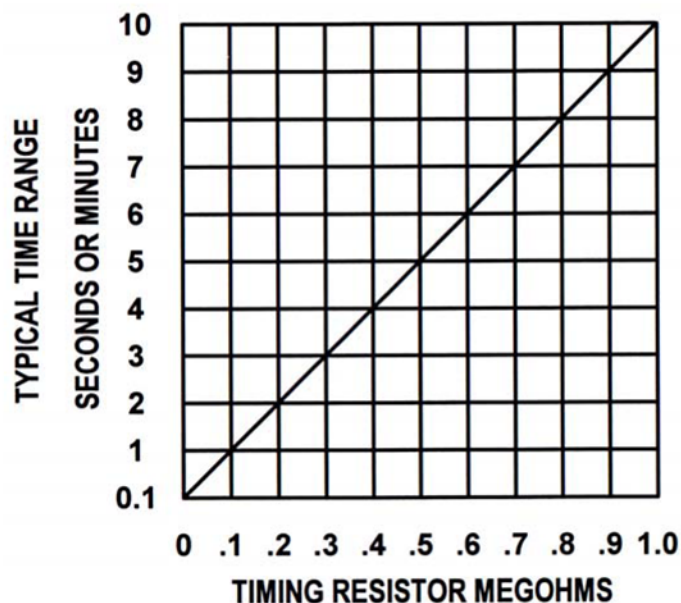
PAGE 1  
OF 2

DATE  
6-4-01

**602S**

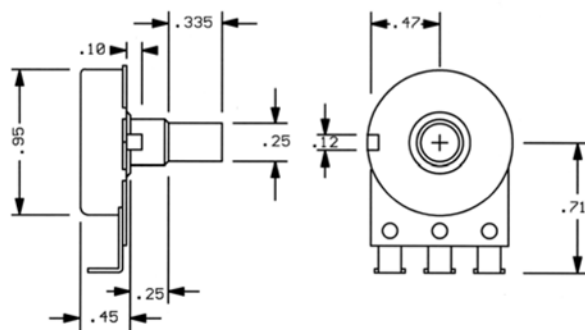
REV  
B

## CALIBRATION RESISTANCE VS TIME

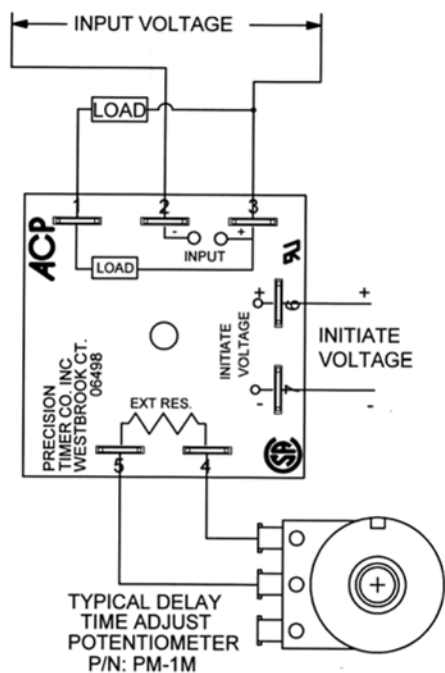


## ACCESSORIES – AVAILABLE FROM STOCK

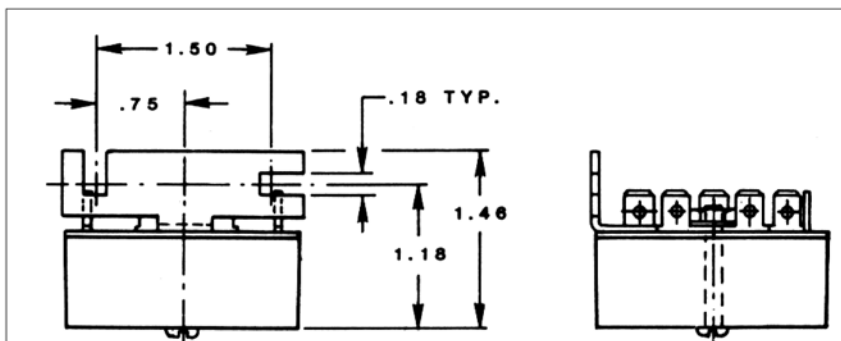
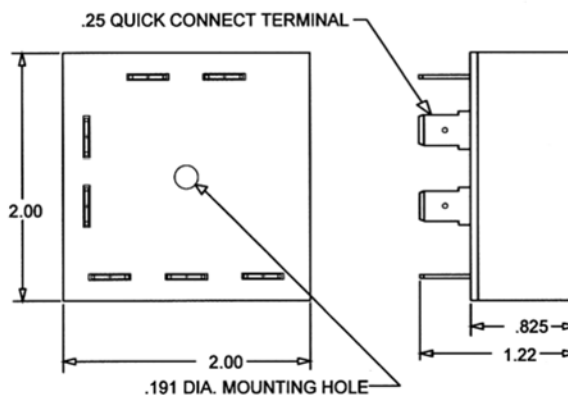
ORDER P/N: PM – 1M 1 MEGOHM  $\pm 20\%$   
PM – 100K 100 KOHM  $\pm 20\%$



## TYPICAL WIRING



## OUTLINE DRAWING



Order bracket mount model as: 602SBM – (T) (V) (P)

MADE IN USA

American Control Products / Precision Timer  
a division of Prime Technology  
344 Twin Lakes Road  
North Branford, CT 06471  
Telephone: (203) 481-5721  
Fax: (203) 481-8937  
Email: sales@primetechnology.com  
www.primetechnology.com

## TECHNICAL BULLETIN

## SOLID STATE TIMING MODULE

PAGE 2  
OF 2

DATE  
6-4-01

602S

REV  
B

**PRIME**  
TECHNOLOGY