## Solid State Timers and Controllers



## EPC-12207 <br> Single-Shot Interval Timer

The model EPC-12207 is an all solid state digital timer intended for use in applications requiring an external load circuit to be energized for an interval of time each time the start switch of the timer is momentarily pressed. The timing period is set by a 32 position rotary switch which adjusts the timer from OFF to the maximum time as specified by the model number. Thirty two positions increment the time by adding the base time to each position. As a complete timing assembly, the EPC-12207 is ready to mount behind a front panel to form an integral timing controller. Available in seven operating voltages ranging from 12 V DC up to 115 V AC.

## Mechanical



## A Typical Front Panel Layout



Shown is the EPC-12207 with a -7 timing range of 30 seconds to 15 minutes 30 seconds in 30 second steps

Timing Diagram


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## Specifications

Operating Voltage: 12 V DC ( $10 \mathrm{~V}-15 \mathrm{~V}$ ), 24V DC ( $20 \mathrm{~V}-30 \mathrm{~V}$ ), 48 V DC ( $44 \mathrm{~V}-52 \mathrm{~V}$ ), 110 V DC (100V-120V), 115V AC (105V - 135V) $50 / 60 \mathrm{~Hz}$.
Timing Mode: Single-shot interval.
Timing Increments: Fifteen models from 0.5 second to 1 hour (See Ordering Information).
Timing Range: Range is the incremental timing period $\times 31$ in 31 incremental steps:
(-1) $\quad 0.5-15.5$ seconds in 0.5 second increments
(-2) $\quad 1-31$ seconds in 1 second increments
(-3) $5-155$ seconds in 5 second increments
(-4) $10-310$ seconds in 10 second increments
(-5) $\quad 15-465$ seconds in 15 second increments
(-6) $20-620$ seconds in 20 second increment
(-7) $25-775$ seconds in 25 second increment
$(-8) \quad 30-930$ seconds in 30 second increment
(-9) $\quad 1-31$ minutes in 1 minute increments

See
Ordering Information
(-10) $2-62$ minutes in 2 minute increments
(-11) $3-93$ minutes in 3 minute increments
$(-12) \quad 5-155$ minutes in 5 minute increments
(-13) $\quad 10-310$ minutes in 10 minute increments
(-14) $\quad 30-930$ minutes in 30 minute increments
(-15) $\quad 1-31$ hours in 1 hour increments
"OFF" Position: The position marked "OFF" disables the timer from all operation.
Output: Solid state switch - AC models rated for 1A, DC models rated for 0.5A.
Output Switch Leakage Current: AC models have 3 mA , and DC models have 1.5 mA maximum.
Output Switch Voltage Drop: 2V maximum, AC and DC models.
Internal Clock: The internal clock is independent of the AC line frequency, and is factory set to provide timing accuracy to $1 \%$ of all switch positions.
Timing Repeatability: $1 \%$ of the time selected.
Transient Protection: Protected by silicon transient suppressors which respond to transients within $1 \times 10^{-12}$ seconds to a peak pulse power dissipation of 1500 watts, with transient surge currents to 200 amperes for durations up to $1 / 120$ second at $25^{\circ} \mathrm{C}$. Maximum transient voltage protection is 6000 volts as delivered through a source resistance of 30 ohms with a max. duration of 8.3 mS .
Operating Temperature: $-20^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$.
Data Sheet Revision Date: September 11, 1997
Ordering Information

| Part Number | Operating Voltage |  | Timing Range |
| :---: | :---: | :---: | :---: |
| EPC-12207 | $\begin{aligned} & (-2) 12 \mathrm{~V} D C \\ & (-3) 24 \mathrm{~V} D C \\ & (-4) 48 \mathrm{~V} D C \\ & (-5) 110 \mathrm{~V} D C \\ & (-6) 24 \mathrm{~V} \mathrm{AC} \\ & (-7) 48 \mathrm{~V} \mathrm{AC} \\ & (-8) 115 \mathrm{~V} \mathrm{AC} \end{aligned}$ | $\begin{aligned} & -1 \\ & -2 \\ & -3 \\ & -4 \\ & -5 \\ & -6 \\ & -7 \\ & -8 \\ & -9 \\ & -10 \\ & -11 \\ & -12 \\ & -13 \\ & -14 \\ & -15 \end{aligned}$ | $0.5-15.5$ seconds in 0.5 second increments <br> 1-31 seconds in 1 second increments <br> 5-155 seconds in 5 second increments <br> 10-310 seconds in 10 second increments <br> 15-465 seconds in 15 second increments <br> 20-620 seconds in 20 second increment <br> 25-775 seconds in 25 second increment <br> $30-930$ seconds in 30 second increment <br> 1-31 minutes in 1 minute increments <br> 2-62 minutes in 2 minute increments <br> 3-93 minutes in 3 minute increments <br> 5-155 minutes in 5 minute increments <br> 10-310 minutes in 10 minute increments <br> 30-930 minutes in 30 minute increments <br> 1-31 hours in 1 hour increments |

Example: EPC-12207-8-4 Is the model EPC-12207 operating from 115V AC with a switch selectable timing range of 10 to 310 seconds in 10 second increments.

