Digital Series
Models DDS100 & DDS101

Elapsed Time Indicator Model

DDS100 Solid-State Elapsed Time Indicators have been developed to meet the most difficult requirements of many military and aerospace applications. In one PCB mount package, the DDS100 provides highly reliable means of monitoring the system. All connections are made via printed wiring and the output brought to a data collection point for system reading or to a single dedicated connector.

Elapsed time can be read from the meter by mating the printed wiring board connections with the M7793/12-1 reader's connector and operating the reader. Time range is 99999.99 hours.

Event Counter Model

The DDS101 Solid-State Event Counter records counts when the unit receives power for greater than 5 seconds. Power-on times of less than 4 seconds will not cause the counter to increment, allowing the count to be read without affecting the results. The count range is 9,999,999.

All connections, data collection, and the display of counts are made in the same manner as the DDS100 Elapsed Time Indicator. The DDS101 Event Counter meets the requirements of M7793 and the same environmental, mechanical, and electrical specifications as the DDS100.

FEATURES

- Monitors your system usage
- PCB mount
- Non-volatile memory
- Elapsed Time Indicator model meets MIL-M-7793/13
- MIL-M-7793/13 qualified model is also available

MECHANICAL SPECIFICATIONS

Case Dimensions: 1.1" long x .450" wide x .275" high

Package Size: I/A/W meets M7793/13

Weight: Less than 0.2 ounces

Model DDS100: Elapsed Time Indicator

Model DDS101: Event Counter

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range: -65 to +125°C

Shock: MIL-STD-202, Method 213, Condition I

Vibration: MIL-STD-202, Method 204, Condition D

Life Accuracy: ±0.1% from -65 to +125°C and 4.5 to 10 VDC

Power Consumption: 5 VDC

ELECTRICAL SPECIFICATIONS

The meters meet or exceed applicable requirements of MIL-M-7793 and M7793/13.

Operating Voltage Range: 4.5 to 10 VDC

Ripple Voltage: 2 volt peak (4 volt peak-to-peak) ripple between 10Hz and 10kHz superimposed on 7.0 VDC

Output Impedance: 100kΩ ± 10%

Logic Zero: Between 0.0 and +0.2 volts

Logic One: Between +3.3 and +6.6 volts

Power Consumption: 2 milliwatts, max.

Transient Protection: Operation when subjected to ±25 volt transients of 10 microsecond duration occurring at a 1 millisecond repetition rate

Dielectric: Withstands 600 VRMS (room) and 350 VRMS (altitude) applied between the power terminals (+5 VDC and common) and an external ground that contact the meter case on the five sides without terminals
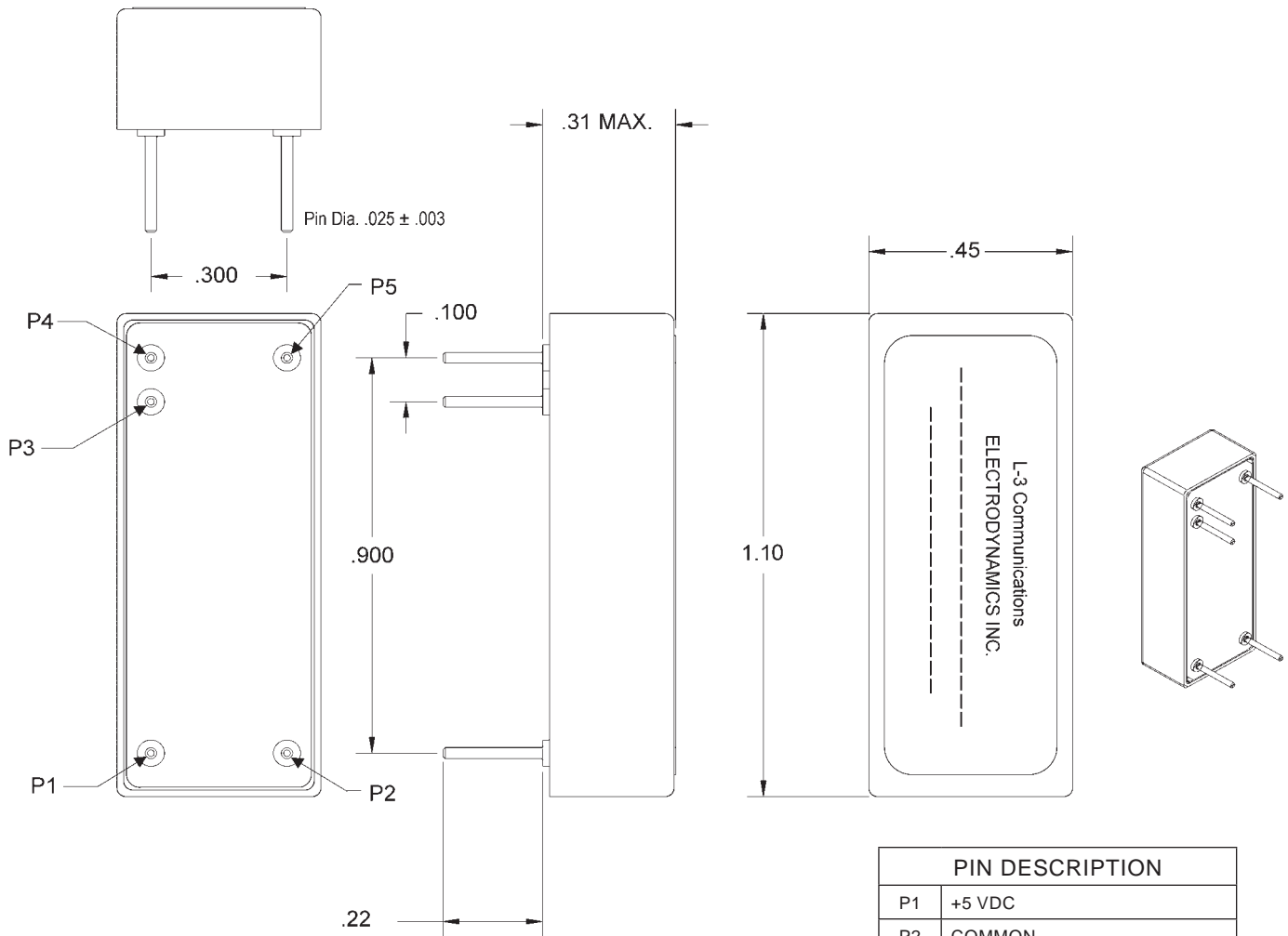
Insulation Resistance: MIL-STD-202, Method 302, Cond. B

Accuracy: 0.1% over temperature/voltage range

Output Data: Serial binary coded decimal format

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EDI16-16

86

.31 MAX.

Pin Dia. .025 ± .003

.300

P4

P5

.100

.45

P3

.900

1.10

L-3 Communications
ELECTRODYNAMICS INC.

P1

P2

.22

PIN DESCRIPTION	
P1	+5 VDC
P2	COMMON
P3	OUTPUT DATA TO READER
P4	INPUT FROM READER (+5 V)
P5	COMMON

Common pins are internally connected

DDS100 and DDS101

NOTE:
Dimensions in inches.
Tolerances, decimals: ±.02 for two-place decimals;
±.015 for three-place decimals.

This page consists of basic marketing information that is not defined as technical data under EAR Part 772.

ELAPSED TIME INDICATORS &
EVENT COUNTERS

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