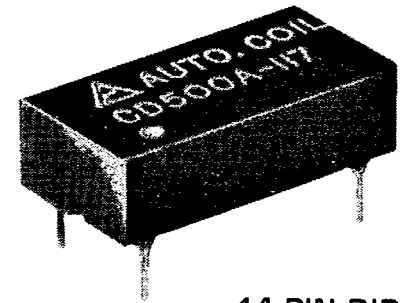


T-47-13

CA500 Series Military TTL Digital Delay Module, Single Delay

- Integrated circuits per Mil-Std-883B
- TTL input and output
- Precise and stable delay
- Reliable hybrid construction
- No external components required
- Fan out 10TTL loads
- Operating temperature -55°C +125°C
- Storage temperature -65°C to +150°C



14 PIN DIP

Electrical Characteristics:

| | |
|---|-----------------|
| V _{IH} (High level input voltage) | 2.0 to 5.0V |
| I _{IH} (High level input current) | 50 μA Max. |
| V _{IL} (Low level input voltage) | 0.8 V Max. |
| I _{IL} (Low level input current) | -2 ma Max. |
| V _{OH} (High level output voltage) | 2.5 V Min. |
| V _{OL} (Low level output voltage) | 0.5 V Max. |
| V _{CC} (Supply voltage) | 5.0 V ± 0.50VDC |
| I _{CC} (Supply current) | 75 ma Max. |

Mechanical Specifications:

Case: Epoxy filled D.A.P.
 Leads: Alloy 42 or equiv.
 solder coated
 Marking: White epoxy ink

Rescreening
 10 cycles per method 1010
 Cond B and 24 hrs. bake per
 method 1008 Cond B of
 Mil-Std-883

Also Available:

Intermediate delays
 Tighter delay tolerances
 Falling edge delay specifications
 Tapped modules

Input & test conditions are not limiting parameters. All digital delay modules can be operated at conditions other than specified. Since accuracies may be slightly affected, we suggest that the module be evaluated under specific operating conditions.

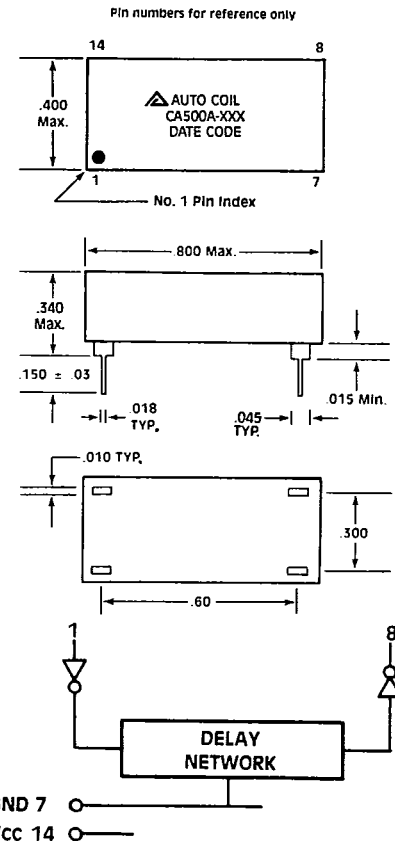
All items comply with applicable portions of Group A and B requirements of Mil-D-23859

Specifications subject to change without notice.

Nominal Delays (in NS) ±2 NS or 5% Whichever is Greater

| Automatic Coil Part Number | PIN 1 to 8 | Automatic Coil Part Number | PIN 1 to 8 |
|----------------------------|------------|----------------------------|------------|
| CA500A-101 | 6 | CA500A-118 | 60 |
| CA500A-102 | 8 | CA500A-119 | 70 |
| CA500A-103 | 10 | CA500A-120 | 80 |
| CA500A-104 | 12 | CA500A-121 | 90 |
| CA500A-105 | 14 | CA500A-122 | 100 |
| CA500A-106 | 16 | CA500A-123 | 110 |
| CA500A-107 | 18 | CA500A-124 | 120 |
| CA500A-108 | 20 | CA500A-125 | 130 |
| CA500A-109 | 22 | CA500A-126 | 140 |
| CA500A-110 | 24 | CA500A-127 | 150 |
| CA500A-111 | 26 | CA500A-128 | 200 |
| CA500A-112 | 28 | CA500A-129 | 250 |
| CA500A-113 | 30 | CA500A-130 | 300 |
| CA500A-114 | 35 | CA500A-131 | 350 |
| CA500A-115 | 40 | CA500A-132 | 400 |
| CA500A-116 | 45 | CA500A-133 | 450 |
| CA500A-117 | 50 | CA500A-134 | 500 |

Output rise time (TPLH) 4.0 NS max. (0.75 to 2.4 V level).



Test Conditions:

- 1) All measurements are made @ 25°C
- 2) VCC is maintained @ 5.0 VDC
- 3) All measurements are made with no loads on output
- 4) Delay measured @ 1.5V level
- 5) Delay & tolerance for leading edges only (TPLH) - falling edges (TPHL) closely matched to TPLH

Input Conditions:

- 1) Pulse amplitude: 3.20V
- 2) Input rise time 3.0 NS (10 to 90%)
- 3) Pulse width 2 × total delay
- 4) Duty cycle < 25%