

6001 Series Delay On Operate Digital Timing Module

Product Facts

- Fixed delay on operate timer
- 300mA output
- CMOS digital design
- Voltage surge protection
- Qualified to MIL-R-83726/13

Electrical Specifications

Timing Range — 50 ms to 600 s.

Timing Accuracy — $\pm 10\%$ of nominal timing under all conditions of input voltage and environmental extremes

Recycle Characteristics

Before Time Out — A power interruption occurring after the start but before completion of the timing cycle shall be for a duration of 0.5% of the nominal time delay or 10ms, whichever is greater, to ensure a loss in timing of no greater than 10%

After Time Out — A power interruption of 0.5% of the nominal time delay or 10ms, whichever is greater, will initiate a new timing cycle with a loss in timing of no greater than 5%

Input Data

Input Voltage — 28Vdc, nominal; range 18 to 31Vdc

Current Drain (at 25°C, 28Vdc) — 10mA (max.), plus load current

Reverse Polarity Protection — The timer will not be damaged or operate when input voltage polarity is reversed

Output Data

Configuration — 1 Form A (SPST-NO) solid state switch closure to ground

Load Ratings

Resistive — 300mA @ +25°C, derated to 100mA @ +125°C

Inductive — Three MIL-R-5757/9 relays (any relay with 26.5Vdc coil)

Lamp Load — Two MS25237-327 lamps per MIL-L-6363

Load Suppression — Suppression for inductive loads for output protection is provided within the unit

Voltage Drop — 2.5Vdc, max. @ -55°C and +25°C; 2.0 Vdc, max., @ +125°C

Leakage Current — 1 μ A, max. @ +25°C, 10 μ A, max. @ +125°C

Insulation Resistance — 1,000 megohms, min., @ 500Vdc, measured between all terminals tied together to the case

Dielectric Strength — 500Vrms, 60 Hz., at sea level, measured between all terminals tied together to the case

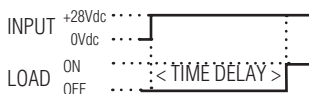
Transients

Voltage Surge — Per MIL-STD-704A, figure 9, limit 1, for category B equipment

Self-generated Spikes — ± 10 V

KILOVAC 6001 series delay on operate timer modules are miniature devices combining solid state timing circuits with solid state switch outputs in robust hermetically sealed DIP enclosures. The 1 Form A (SPST-NO) switch is rated 300mA.

Timing Diagram



Environmental Specifications

Temperature Range — -55°C to +125°C

Altitude — 80,000 ft.

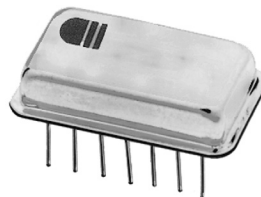
Shock — 150 G's, 11 \pm 1ms half-sine wave

Vibration (sinusoidal) — 10 - 80 Hz. at 0.06 inch DA; 80 - 3,000 Hz. at 20 G's

Sealing — MIL-STD-202, method 112, condition C

Materials:

- Cover — Nickel
- Header — Kovar® Alloy
- Pins — Kovar® Alloy, gold plated
- Marking — Per MIL-R-83726
- Weight — 0.42 oz (12g) max.



Part Numbering System

Typical Part Number 6001 -6002 C

Model Number:

6001 = Fixed timer, -55°C to +125°C

Timing Code:

Four-digit code for any value between 50ms and 600s.

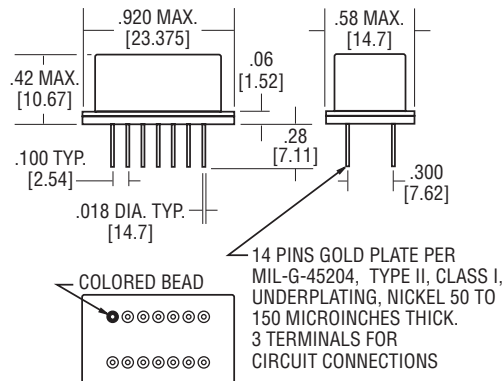
The timing code consists of four digits and gives the time in ms. The first three digits are the significant figures and the last digit is the number of zeros following the significant figures; thus 50 ms would be coded 0500, 1.1 s would read 1101, and 1 m (60 s) would be 6002.

Optional Suffix:

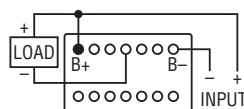
C = Commercial version equivalent to M83726/13.

A typical part number would be 6001-6002C. This solid state output timing module has a time delay of 60s at 28Vdc and is the commercial equivalent to M83726/13.

Outline Dimensions



Wiring Diagram



PIN 10 IS ACTIVE. DO NOT CONNECT.

Special Notes:

- Load is connected between B+ and terminal designated. Delay begins upon application of power to terminals (B+ and B-).
- Always consult latest military specification for changes and additional information.

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