DELAY ON OPERATE ADJUSTABLE SOLID STATE OUTPUT

1900

FEATURES:

- Adjustable Timing
- Hermetic Package
- Reverse Polarity Protection
- CMOS Digital Design
- Built to MIL-R-83726 Environmentals

ELECTRICAL SPECIFICATIONS:

Timing Range: 50 ms to 240s

Tolerance: ±10% or 10 ms whichever is greater

Repeatability: ±0.1%

Recycle Time: 10 ms

Recovery Time: 20 ms

Input Data:
   Input voltage: 18 to 31 V dc
   Current drain: 10 mA plus load current

Output Data:
   Output form: SPSTNO Solid state switch closure to ground.
   Output rating: 300 mA (25°C)
                     100 mA (125°C)
   Saturation voltage: 2.5 V maximum
   Leakage: 1 uA (25°C)
             10 uA (125°C)

ENVIRONMENTAL SPECIFICATIONS:

Temperature Range: 1911   −55°C to +85°C
                       1921   −55°C to +125°C

Vibration: 20 G's, 10 to 2000 Hz.

Shock: 50 G's, 11 ±1 milliseconds duration.

Insulation resistance: 1000 megohms at 500 VDC, all terminals to case.

Dielectric strength: 500 V RMS, 60 Hz at sea level, all terminals to case.
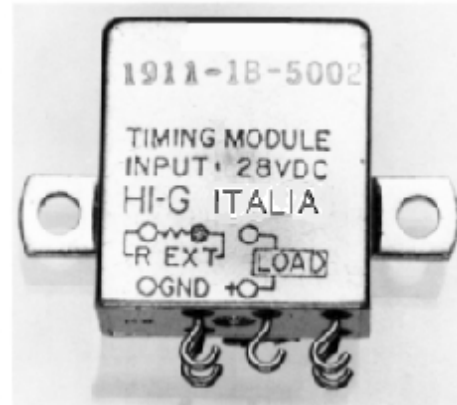
Sealing: Hermetic, 1.3 inches mercury.
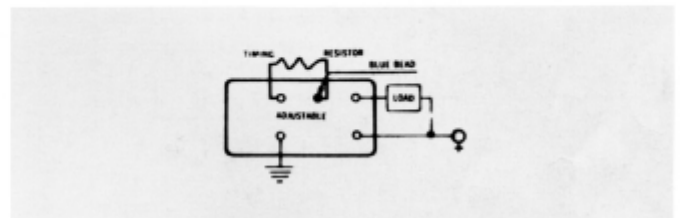
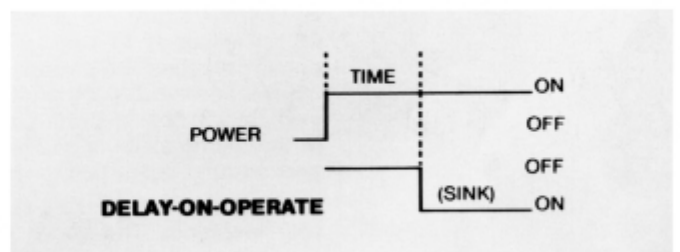**Life:** Over 1,000,000 operations.

Weight: 1 oz. max.

OPTIONS:

- Header and mounting configuration
- Tighter tolerances

WIRING DIAGRAM

TIMING DIAGRAM

SPECIAL NOTES:

- **ADJUSTABLE TIMING FORMULA**

   The resistance required to obtain timing within this range is determined by using the formula:

   Rx = 400K (T/T max.) — 40K
   Rx = External Res. in OHMS
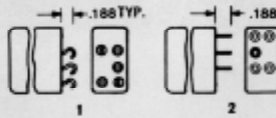   T = Desired time in seconds
   T max. = Maximum time (code)

   A high quality deposited carbon 1%, .1W (min.) resistor is recommended for external resistance.

See Note 1.
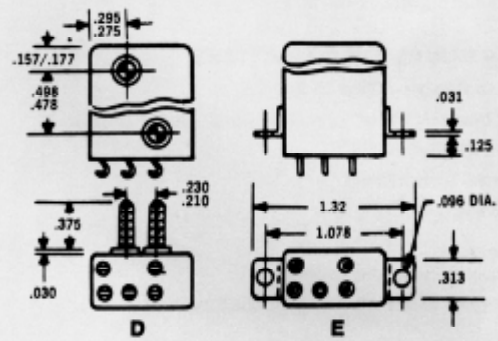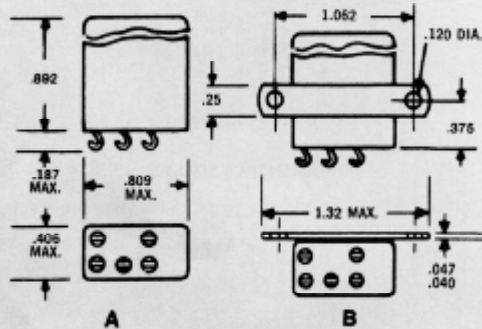
MECHANICAL SPECIFICATIONS

HEADER STYLES

Note: Terminal spacing 0.2 inches all headers with terminal dia. 0.03 inch.

MOUNTING STYLES

Note: Studs shown are 4-40 thread size.
DIMENSIONS IN INCHES — TOLERANCE NOT IMPLIED

HOW TO ORDER:

Hi-G Adjustable Time Delay Modules cover one decade, e.g., 62 milliseconds to 620 milliseconds; you may select any decade that best suits your application within the range of 50 milliseconds to 240 seconds. (Of course, longer ranges are available on special order.) The upper decade limits is T max. in the timing formula and is the timing code number in the part number described in the following paragraph.

The part number for a Hi-G Time Delay Module consists of four elements: The series number, Header Style, a letter signifying mounting style, and the timing code number. The timing code number consists of four digits and gives the time in milliseconds. The first three digits are the significant figures and the last digit is the number of zeros following the significant figures; thus 50 milliseconds would be coded 0500, 1.1 seconds would read 1101, and 1 minute (60 seconds) would be 6002.

A typical part number for an adjustabale timing module is 1921-1A-1102; this is a DC unit in the –55°C to +125°C temperature range with a hooked pins in a Style A mounting, and with a time delay range of 1.1 to 11 seconds.

Example: **Hi-G Part Number**

1921 — 1A — 1102

SERIES ————————— TIMING CODE
HEADER STYLE —————— MOUNTING

NOTE 1:

The time delay may be extended beyond the normal "decade" range of above formula by increasing the timing resistance "RX", beyond standard 400k Max value up to a maximum value of 1.2 M. However, the tolerance and repeatability are not tested and therefore not guaranteed at this high "RX" value. Also, some slight non-linearity between Rx and desired time delay will occur.