

# DIONICS INC.

65 RUSHMORE STREET  
WESTBURY, NEW YORK 11590  
(516) 997-7474  
TWX 510-222-0974

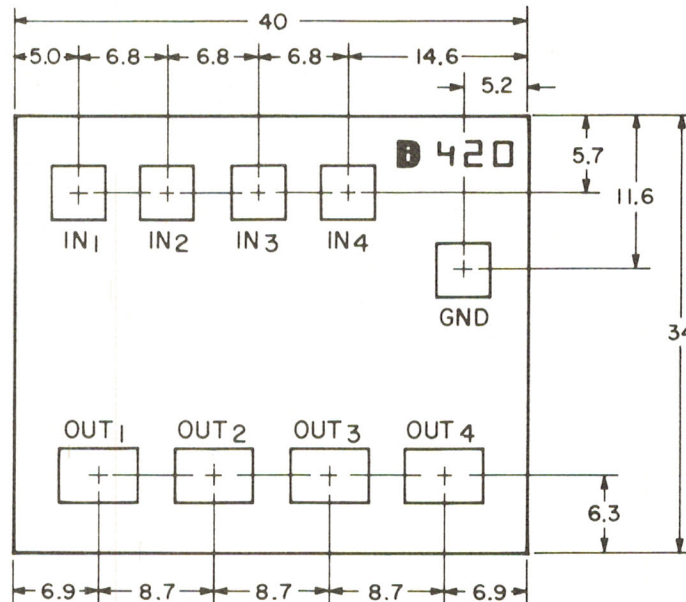
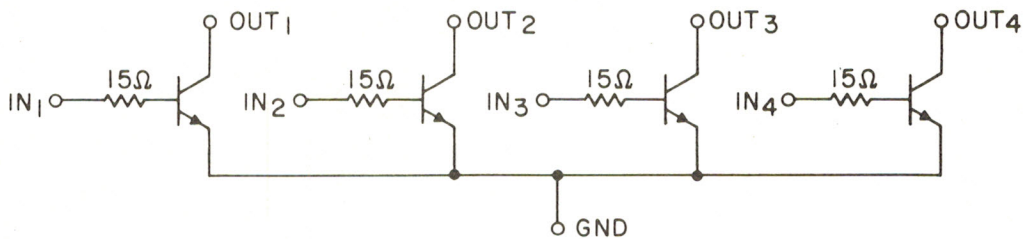
# DI-420

## DI-420 LOW VOLTAGE LED DIGIT DRIVER

The DIONICS DI-420 is a four-line LED display driver specifically engineered for CMOS watch chip applications. It is capable of sinking in excess of 60 mA from common-cathode LED displays.

### FEATURES

- High Gain
- Direct interface with CMOS watch circuits
- Low "on" voltage drop



### NOTES:

1. Bonding pads: aluminum
2. Chip back: gold
3. Dimensions in mils

### CHIP LAYOUT

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ )

| PARAMETER              | SYMBOL        | CONDITIONS  | MIN | TYP  | MAX  | UNITS |
|------------------------|---------------|---|-----|------|------|-------|
| Output Leakage Current | $I_{CER}$     | $V_{CE} = 6.0\text{ V}$ $R_{BE} = 20\text{ K}$<br>(All 4 units in parallel) | —   | 20   | 800  | nA    |
| Output "on" voltage    | $V_{CE(sat)}$ | $I_C = 60\text{ mA}$ $I_B = 1.0\text{ mA}$                                  | —   | 0.25 | 0.35 | V     |
| Input "on" voltage     | $V_{BE(sat)}$ | $I_C = 60\text{ mA}$ $I_B = 1.0\text{ mA}$                                  | —   | 0.85 | 1.0  | V     |