

**MNLH0070-0H REV 0AL**Original Creation Date: 09/18/95  
Last Update Date: 09/19/95  
Last Major Revision Date: 09/18/95**PRECISION BCD BUFFERED REFERENCE****Industry Part Number**

LH0070

**NS Part Numbers**

LH0070-0H-MIL

**Prime Die**

LH0070

**Processing**

MIL-STD-883, Method 5004

**Quality Conformance Inspection**

MIL-STD-883, Method 5005

**Subgrp Description****Temp ( °C)**

|    |                     |      |
|----|---------------------|------|
| 1  | Static tests at     | +25  |
| 2  | Static tests at     | +125 |
| 3  | Static tests at     | -55  |
| 4  | Dynamic tests at    | +25  |
| 5  | Dynamic tests at    | +125 |
| 6  | Dynamic tests at    | -55  |
| 7  | Functional tests at | +25  |
| 8A | Functional tests at | +125 |
| 8B | Functional tests at | -55  |
| 9  | Switching tests at  | +25  |
| 10 | Switching tests at  | +125 |
| 11 | Switching tests at  | -55  |

## Electrical Characteristics

### DC PARAMETERS

(The following conditions apply to all the following parameters, unless otherwise specified.)

DC:  $V_i = 15V$ ,  $R_L = 10K$

| SYMBOL | PARAMETER                        | CONDITIONS                               | NOTES | PIN-NAME | MIN  | MAX      | UNIT | SUB-GROUPS |
|--------|----------------------------------|------------------------------------------|-------|----------|------|----------|------|------------|
| $I_s$  | Quiescent Current (Functional)   | $I_o = 0mA$                              |       |          | 1    | 10       | mA   | 1, 2, 3    |
| $V_o$  | Output Voltage (Functional)      |                                          |       |          | 9.5  | 10.5     | V    | 1, 2, 3    |
| $V_o$  | Output Voltage                   | $V_o = 10.000V + \text{Output Accuracy}$ | 1     |          | 9.99 | 10.01    | V    | 1          |
|        |                                  |                                          | 1     |          | 9.97 | 10.03    | V    | 2, 3       |
|        | Output Accuracy                  |                                          |       |          |      | $\pm 1$  | %    | 1          |
|        |                                  |                                          |       |          |      | $\pm 3$  | %    | 2, 3       |
|        | Line Regulation                  | $13V < V_i < 33V$                        |       |          |      | $\pm 1$  | %    | 1          |
|        |                                  | $11.4V < V_i < 15V$                      |       |          |      | $\pm 5$  | %    | 1          |
|        | Load Regulation                  | $0 < I_o < 5mA$                          |       |          |      | $\pm 03$ | %    | 1, 2, 3    |
| $I_s$  | Quiescent Current                | $V_i = 13V$                              |       |          | 1    | 5        | mA   | 1, 2, 3    |
|        |                                  | $V_i = 33V$                              |       |          | 1    | 5        | mA   | 1, 2, 3    |
|        | Change In Quiescent Current      | $13V < V_i < 33V$                        |       |          |      | 1.5      | mA   | 1, 2, 3    |
|        | Output Voltage Change with Temp. | $25^\circ C < T_A < 85^\circ C$          | 3     |          |      | $\pm 2$  | %    | 1          |
|        |                                  | $-25^\circ C < T_A < 25^\circ C$         | 2     |          |      | $\pm 2$  | %    | 1          |
|        | Input Voltage Range              |                                          | 2     |          | 12.5 | 40       | V    | 1, 2, 3    |
| $R_o$  | Output Resistance                |                                          | 1     |          |      | 1        | Ohm  | 1, 2, 3    |
|        | Long Term Stability              |                                          | 2     |          |      | $\pm 2$  | %/YR | 1          |

Note 1: Parameter tested go-no-go only.

Note 2: Guaranteed parameter not tested.

Note 3: This test is performed either on J273 when program is set to run with switch register = mode 1 (SEE FTS-LH0070-R) or Drift oven tester per RPI-3-382. "THIS NOTE IS INVALID AND CURRENTLY BEING UPDATED. CONTACT FACTORY."