

REVISIONS

| LTR | DESCRIPTION | DATE (YR-MO-DA) | APPROVED |
|-----|--|-----------------|-------------------|
| A | Change to Military drawing format. Page 8 table I; change group A subgroup for +V _R and -V _R ; add end-point electrical limits for +V _{RINT} and -V _{RINT} . Page 10: Change output offset adjust and temperature effect for device types 03 and 04 trim circuits. | 86-12-31 | N. A. Hauck |
| B | Add device types 05 and 06. Inactivate case outline X. Add case outlines C, Y, and 3. Add vendors CAGE 33256 and 34707. Change drawing CAGE code to 67268. Editorial changes throughout. | 89-08-01 | W. Heckman |
| C | Changed to reflect MIL-H-38534 processing. Update document. Editorial changes throughout. | 92-12-22 | K. A. Cottongim |
| D | Changes in accordance with NOR 5962-R212-93. | 93-08-17 | K. A. Cottongim |
| E | Changes in accordance with NOR 5962-R045-94. | 93-11-18 | K. A. Cottongim |
| F | Changes to table I, note 1. | 99-01-08 | K. A. Cottongim |
| G | Corrections to sheet 1, figure 1- case outlines X and Y, and figure 3. Update drawing boilerplate. | 05-01-10 | Raymond Monnin |
| H | Figure 1, case outline Y, correct the row to row spacing symbol from L ₁ to E ₁ . | 07-01-26 | Joseph Rodenbeck |
| J | Table II, added note 1 to Group C end-point test parameters. Editorial changes throughout. -sld | 14-09-18 | Charles F. Saffle |

THE ORIGINAL FIRST SHEET OF THIS DRAWING HAS BEEN REPLACED.

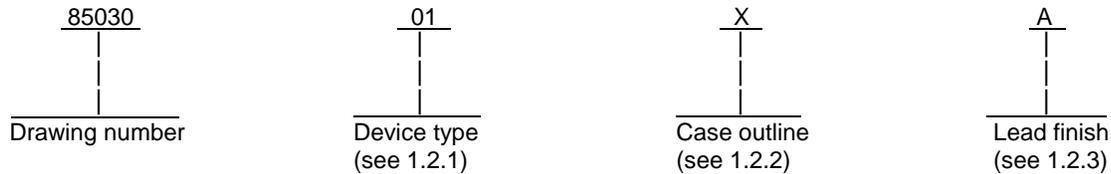
CURRENT CAGE CODE 67268

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|---|-----------------------------------|--|--------------------|--------------|---|---|---|---|---|---|----|----|----|---|---|---|--|--|--|--|
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| SHEET | | | | | | | | | | | | | | | | | | | | |
| REV | | | | | | | | | | | | | | | | | | | | |
| SHEET | | | | | | | | | | | | | | | | | | | | |
| REV STATUS OF SHEETS | REV | J | J | J | J | J | J | J | J | J | J | J | J | J | J | J | | | | |
| | SHEET | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | | | | |
| PMIC N/A | PREPARED BY Donald R. Osborne | <p align="center">DLA LAND AND MARITIME COLUMBUS, OHIO 43218-3990 http://www.landandmaritime.dla.mil/</p> <p align="center">MICROCIRCUIT, HYBRID, LINEAR, PRECISION VOLTAGE REFERENCES, THIN FILM</p> | | | | | | | | | | | | | | | | | | |
| STANDARD MICROCIRCUIT DRAWING | CHECKED BY D. A. Di Cenzo | | | | | | | | | | | | | | | | | | | |
| THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE | APPROVED BY N. A. Hauck | | | | | | | | | | | | | | | | | | | |
| AMSC N/A | DRAWING APPROVAL DATE 86-04-28 | | | | | | | | | | | | | | | | | | | |
| | REVISION LEVEL J | SIZE A | CAGE CODE 14933 | 85030 | | | | | | | | | | | | | | | | |
| | | SHEET 1 OF 12 | | | | | | | | | | | | | | | | | | |

1. SCOPE

1.1 Scope. This drawing describes device requirements for class H hybrid microcircuits to be processed in accordance with MIL-PRF-38534 and a choice of case outlines and lead finishes are available and are reflected in the Part or Identifying Number (PIN).

1.2 PIN. The PIN shall be as shown in the following example:



1.2.1 Device type(s). The device type(s) shall identify the circuit function as follows:

| <u>Device type</u> | <u>Generic number</u> | <u>Circuit function</u> |
|--------------------|-----------------------|----------------------------------|
| 01, 02 | 2700 | Precision +10.000-volt reference |
| 03, 04 | 2702 | Precision ±10.000-volt reference |
| 05, 06 | 2701 | Precision -10.000-volt reference |

1.2.2 Case outline(s). The case outline(s) shall be as designated in MIL-STD-1835 and as follows:

| <u>Outline letter</u> | <u>Descriptive designator</u> | <u>Terminals</u> | <u>Package style</u> |
|-----------------------|-------------------------------|------------------|------------------------------|
| C | GDIP1-T14, CDIP1-T14 | 14 | Dual-in-line |
| X | See figure 1 | 14 | Dual-in-line |
| Y | See figure 1 | 14 | Dual-in-line |
| 3 | CQCC1-N28 | 28 | Square leadless chip-carrier |

1.2.3 Lead finish. The lead finish shall be as specified in MIL-PRF-38534.

1.3 Absolute maximum ratings. 1/

| | |
|--|------------------|
| Supply voltage (V _s): | |
| V _{CC} (device types 01, 02, 03, 04)..... | +20 V dc |
| V _{EE} (device types 03, 04, 05, 06)..... | -20 V dc |
| Power dissipation (P _D), T _A = +25°C: | |
| Device types 01, 02, 05, 06 | 300 mW |
| Device types 03, 04 | 450 mW |
| Storage temperature range | -65°C to +150°C |
| Lead temperature (soldering, 10 seconds)..... | +300°C |
| Short circuit protection (to GND) | Continuous |
| Thermal resistance: | |
| Junction-to-case (θ _{JC}): | |
| Case outlines C and 3..... | See MIL-STD-1835 |
| Case outline X..... | 7°C/W |
| Case outline Y..... | 8°C/W |
| Junction-to-ambient (θ _{JA}): | |
| Case outline X..... | 30°C/W |
| Case outline Y..... | 25°C/W |

1/ Stresses above the absolute maximum ratings may cause permanent damage to the device. Extended operation at the maximum levels may degrade performance and affect reliability.

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1.4 Recommended operating conditions.

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| Supply voltage range (V_{CC}) | +13.5 V dc to +16.5 V dc |
| Supply voltage (V_{EE}) | -13.5 V dc to -16.5 V dc |
| Output current | 5 mA <u>1/</u> |
| Ambient operating temperature range (T_A)..... | -55°C to +125°C |

2. APPLICABLE DOCUMENTS

2.1 Government specification, standards, and handbooks. The following specification, standards, and handbooks form a part of this drawing to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATION

MIL-PRF-38534 - Hybrid Microcircuits, General Specification for.

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-883 - Test Method Standard Microcircuits.
 MIL-STD-1835 - Interface Standard for Electronic Component Case Outlines.

DEPARTMENT OF DEFENSE HANDBOOKS

MIL-HDBK-103 - List of Standard Microcircuit Drawings.
 MIL-HDBK-780 - Standard Microcircuit Drawings.

(Copies of these documents are available online at <http://quicksearch.dla.mil/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2 Order of precedence. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Item requirements. The individual item performance requirements for device class H shall be in accordance with MIL-PRF-38534. Compliance with MIL-PRF-38534 may include the performance of all tests herein or as designated in the device manufacturer's Quality Management (QM) plan or as designated for the applicable device class. The manufacturer may eliminate, modify or optimize the tests and inspections herein, however the performance requirements as defined in MIL-PRF-38534 shall be met for the applicable device class. In addition, the modification in the QM plan shall not affect the form, fit, or function of the device for the applicable device class.

3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38534 and herein.

1/ With resistive load to pin 7 (common).

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3.2.1 Case outline(s). The case outline(s) shall be in accordance with 1.2.2 herein and figure 1.

3.2.2 Terminal connections. The terminal connections shall be as specified on figure 2.

3.2.3 Trim circuits. The trim circuits shall be as specified on figure 3.

3.3 Electrical performance characteristics. Unless otherwise specified herein, the electrical performance characteristics are as specified in table I and shall apply over the full specified operating temperature range.

3.4 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are defined in table I.

3.5 Marking of device(s). Marking of device(s) shall be in accordance with MIL-PRF-38534. The device shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's vendor similar PIN may also be marked.

3.6 Data. In addition to the general performance requirements of MIL-PRF-38534, the manufacturer of the device described herein shall maintain the electrical test data (variables format) from the initial quality conformance inspection group A lot sample, for each device type listed herein. Also, the data should include a summary of all parameters manually tested, and for those which, if any, are guaranteed. This data shall be maintained under document revision level control by the manufacturer and be made available to the preparing activity (DLA Land and Maritime -VA) upon request.

3.7 Certificate of compliance. A certificate of compliance shall be required from a manufacturer in order to supply to this drawing. The certificate of compliance (original copy) submitted to DLA Land and Maritime -VA shall affirm that the manufacturer's product meets the performance requirements of MIL-PRF-38534 and herein.

3.8 Certificate of conformance. A certificate of conformance as required in MIL-PRF-38534 shall be provided with each lot of microcircuits delivered to this drawing.

4. VERIFICATION

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-PRF-38534 or as modified in the device manufacturer's Quality Management (QM) plan. The modification in the QM plan shall not affect the form, fit, or function as described herein.

4.2 Screening. Screening shall be in accordance with MIL-PRF-38534. The following additional criteria shall apply:

a. Burn-in test, method 1015 of MIL-STD-883.

(1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to either DLA Land and Maritime -VA or the acquiring activity upon request. Also, the test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in method 1015 of MIL-STD-883.

(2) T_A as specified in accordance with table I of method 1015 of MIL-STD-883.

b. Interim and final electrical test parameters shall be as specified in table II herein, except interim electrical parameter tests prior to burn-in are optional at the discretion of the manufacturer.

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TABLE I. Electrical performance characteristics.

| Test | Symbol | Conditions 1/ -55°C ≤ T _A ≤ +125°C unless otherwise specified | | Group A subgroups | Device type | Limits | | Unit |
|---|--------------------|--|-------|----------------------|-----------------|---------|------|------|
| | | | | | | Min | Max | |
| Selection output error 2/ | +V _R | +10.000 V output | | 4 | 01 | -5.0 | +5.0 | mV |
| | | | | 5,6 | | -8.0 | +8.0 | |
| | | +10.000 V output | | 4 | 02,04 | -2.5 | +2.5 | mV |
| | | | | 5,6 | | -5.5 | +5.5 | |
| | +10.000 V output | | 4 | 03 | -5.0 | +5.0 | mV | |
| | | | 5,6 | | -10 | +10 | | |
| | -V _R | -10.000 V output | | 4 | 03,05 | +5.0 | -5.0 | mV |
| | | | | 5,6 | | +10 | -10 | |
| -10.000 V output | | 4 | 04,06 | +2.5 | -2.5 | mV | | |
| | | 5,6 | | +5.5 | -5.5 | | | |
| Interim output error | +V _{RINT} | +10.000 V output T _A = +25°C | | 1 | 01,02, 03,04 | -5 | +5 | mV |
| | | | | | | Initial | -10 | |
| | -V _{RINT} | -10.000 V output T _A = +25°C | | 1 | 03,04, 05,06 | +5 | -5 | mV |
| | | | | | | Initial | +10 | |
| Output adjust range for trim circuits (see figure 3) | +V _{RADJ} | +10.000 V output, T _A = +25°C | | 1 | 01,02, 03,04 | -20 | +20 | mV |
| | -V _{RADJ} | -10.000 V output, T _A = +25°C | | 1 | 03,04, 05,06 | +20 | -20 | mV |
| Quiescent current | I _{CC} | V _{CC} = +15 V, no load T _A = +25°C | | 1 | 01,02 | | +14 | mA |
| | | V _{CC} = +15 V, V _{EE} = -15 V, no load T _A = +25°C | | 1 | 03,04 | | +17 | mA |
| | I _{EE} | V _{CC} = +15 V, no load V _{EE} = -15 V T _A = +25°C | | 1 | 03,04 | | -4 | mA |
| | | V _{CC} = +15 V, V _{EE} = -15 V, no load T _A = +25°C | | 1 | 05,06 | | -14 | mA |

See footnotes at end of table.

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TABLE I. Electrical performance characteristics - Continued.

| Test | Symbol | Conditions ^{1/} -55°C ≤ T _A ≤ +125°C unless otherwise specified | Group A subgroups | Device type | Limits | | Unit |
|----------------------------|---------------------|---|----------------------|---------------------------|--------|------|--------|
| | | | | | Min | Max | |
| Line regulation | +V _{RL} | +10.000 V output, T _A = +25°C, +13.5 V ≤ V _{CC} ≤ +16.5 V | 1 | 01,02, 03,04 | -900 | +900 | μV |
| | -V _{RL} | -10.000 V output, T _A = +25°C, -13.5 V ≤ V _{EE} ≤ -16.5 V | 1 | 03,04, 05,06 | +900 | -900 | μV |
| Load regulation | +V _{RLOAD} | +10.000 V output, T _A = +25°C, 0 ≤ I _L ≤ 10 mA | 1 | 01,02, 03,04 | -500 | +500 | μV |
| | -V _{RLOAD} | -10.000 V output, T _A = +25°C, 0 ≤ I _L ≤ 10 mA | 1 | 03,04, 05,06 | +500 | -500 | μV |
| Output current | +I _L | | 1 | 01,02, 03,04 | 10 | | mA |
| | | | 2,3 | | 5 | | |
| | -I _L | | 1 | 03,04, 05,06 | | 10 | mA |
| | | | 2,3 | | | 5 | |
| Output noise ^{3/} | | V _{OUT} = 10 V, no load, 0.1 Hz ≤ BW ≤ 10 Hz, T _A = +25°C | 4 | 01,02, 03,04, 05,06 | | 150 | μV/p-p |

^{1/} Unless otherwise specified, V_{IN} = +15 V, R_L = 2 kΩ to pin 7 (common).

^{2/} Output voltage change as a function of temperature is determined using the box method. Each device is tested at -55°C, +25°C, and +125°C. At each temperature the output voltage (V_{OUT}) must fall within the rectangular area bounded by the minimum and maximum temperatures. This method gives a maximum temperature coefficient of 9 ppm/°C and a typical value of 3 ppm/°C.

^{3/} Parameter shall be tested as part of device initial characterization and after design and process changes. Parameter shall be guaranteed to the limits specified in table I for all lots not specifically tested.

**STANDARD
MICROCIRCUIT DRAWING**

DLA LAND AND MARITIME
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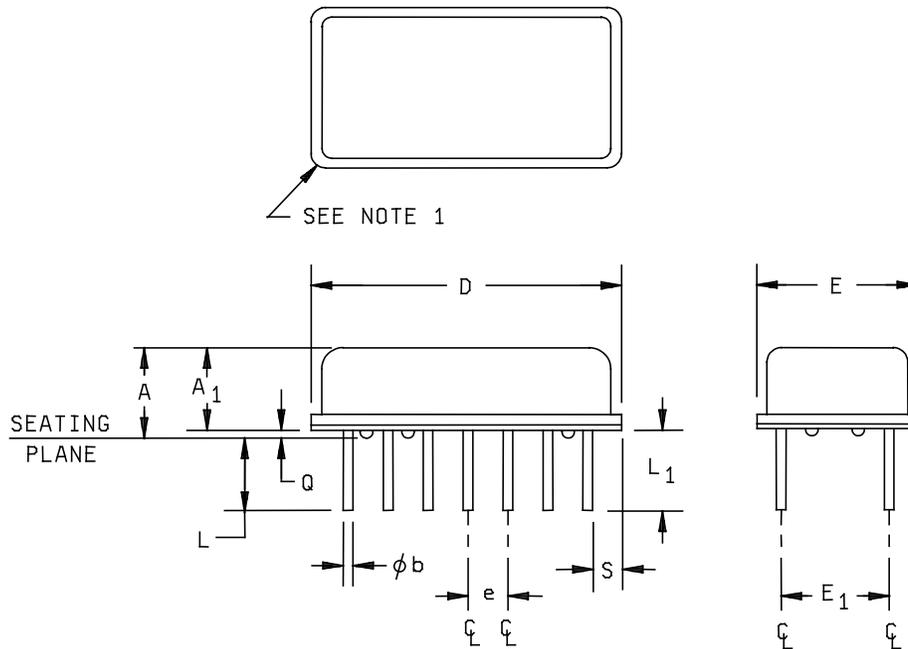
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Case outline X.



| Symbol | Inches | | Millimeters | | Notes |
|----------------|----------|------|-------------|-------|-------|
| | Min | Max | Max | Min | |
| A | .215 | .250 | 5.46 | 6.35 | |
| A ₁ | .175 | .215 | 4.44 | 5.46 | |
| ∅b | .016 | .020 | 0.41 | 0.51 | 7 |
| D | .860 | .885 | 21.84 | 22.48 | 3 |
| E | .490 | .520 | 12.45 | 13.21 | 3 |
| E ₁ | .295 | .305 | 7.49 | 7.75 | 6 |
| e | .100 BSC | | 2.54 BSC | | 4 |
| L | .130 | .255 | 3.30 | 6.48 | |
| L ₁ | .150 | .290 | 3.81 | 7.37 | |
| Q | .020 | .035 | 0.51 | 0.89 | 2 |
| S | .100 | .160 | 2.54 | 4.07 | |
| S ₁ | .080 | .180 | 2.03 | 4.57 | 5 |
| α | 0° | 15° | 0° | 15° | |

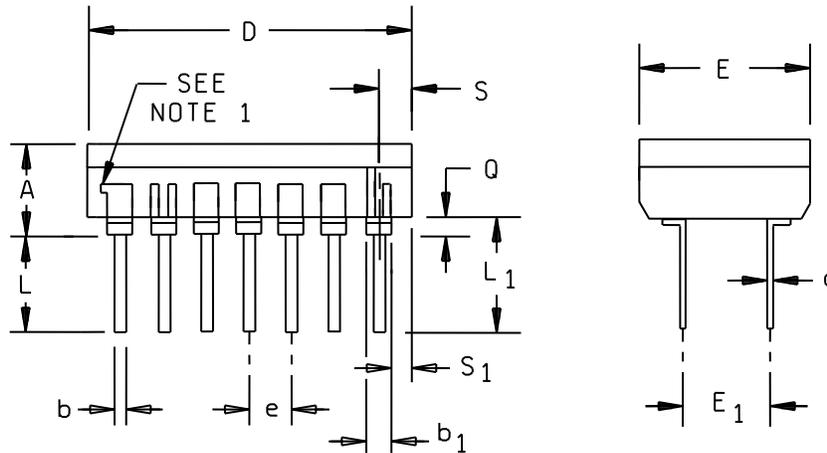
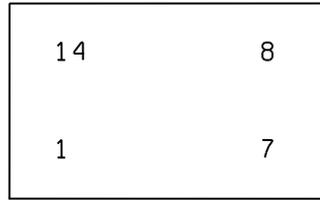
NOTES:

1. Index area: A notch, square-package corner, or a pin one index point shall be located adjacent to pin one and within the shaded area shown. The manufacturer's identification shall not be used as a pin one identification mark.
2. Dimension Q shall be measured from the seating plane to the base plane.
3. This dimension allows for off-center lid, meniscus, and weld squash.
4. The basic pin spacing is .100 inch (2.54 mm) between centerlines. Each pin centerline shall be located within ±.010 inch (0.25 mm) of its exact longitudinal position relative to pins 1 and 14.
5. Dimension S₁ is not used.
6. Lead center when α = 00. E₁ shall be measured at the centerline of the leads (see MIL-STD-1835).
7. All leads: Increase maximum limit by .003 inch (0.08 mm) measured at the widest diameter when lead finish A or B is applied.
8. If this configuration is used, no polymer or organic materials shall be applied or molded to the bottom of the package or cover the leads.

FIGURE 1. Case outline(s).

| | | | |
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Case outline Y.



| Symbol | Inches | | Millimeters | | Notes |
|----------------|----------|------|-------------|-------|-------|
| | Min | Max | Max | Min | |
| A | .140 | .200 | 3.56 | 5.08 | |
| b | .014 | .023 | 0.36 | 0.58 | |
| b ₁ | .030 | .070 | 0.76 | 1.78 | 2 |
| c | .008 | .015 | 0.20 | 0.38 | |
| D | .770 | .810 | 19.56 | 20.57 | |
| E | .480 | .510 | 12.19 | 12.95 | |
| E ₁ | .295 | .305 | 7.49 | 7.75 | 6 |
| e | .100 BSC | | 2.54 BSC | | 4 |
| L | .150 | .200 | 3.81 | 5.08 | |
| L ₁ | .180 | --- | 4.57 | --- | |
| Q | .015 | .035 | 0.38 | 0.89 | 3 |
| S | --- | .137 | --- | 3.48 | 5 |
| S ₁ | .060 | --- | 1.52 | --- | 5 |

NOTES:

1. Index area: A notch or a one identification mark is located adjacent to lead one.
2. The minimum dimension for b₁ may be .023 inch (0.58 mm) for all four corner leads only.
3. Dimension Q shall be measured from the seating plane to the base plane.
4. The basic pin spacing is .100 inch (2.54 mm) between centerlines.
5. Applies to all four corners
6. E₁ shall be measured at the centerline of the leads.

FIGURE 1. Case outline(s) - Continued.

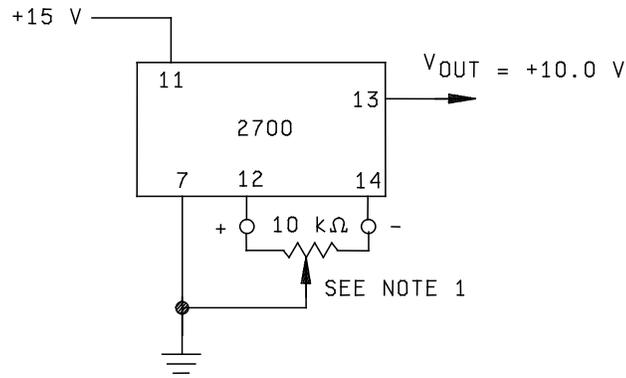
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| STANDARD MICROCIRCUIT DRAWING DLA LAND AND MARITIME COLUMBUS, OHIO 43218-3990 | SIZE A | | 85030 |
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| Device types | Device types 01 and 02 (2700) | | Device types 03 and 04 (2702) | | Device types 05 and 06 (2701) | |
|-----------------|----------------------------------|----------------------|----------------------------------|----------------------|----------------------------------|----------------------|
| Case outlines | C, X, Y | 3 | C, X, Y | 3 | C, X, Y | 3 |
| Terminal number | Terminal symbol | | Terminal symbol | | Terminal symbol | |
| 1 | NC | V _O SEN | -10 V ADJ | V _O SEN | NC | NC |
| 2 | NC | -IN | -10 V OUT | -IN | NC | NC |
| 3 | NC | REF GND | -10 V ADJ | REF GND | NC | REF GND |
| 4 | NC | GND SEN | V _{EE} | GND SEN | NC | GND SENSE |
| 5 | NC | NC | NC | NC | NC | NC |
| 6 | NC | NC | NC | NC | NC | NC |
| 7 | GND | NC | GND | -V _{OS} | GND | -V _{OS} |
| 8 | NC | NC | NC | -V _{OS} | NC | -V _{OS} |
| 9 | NC | NC | NC | V _{EE} | NC | V _{EE} |
| 10 | TEST POINT | NC | TEST POINT | +IN | TEST POINT | +IN |
| 11 | V _{CC} | NC | V _{CC} | V _{CC} | V _{EE} | NC |
| 12 | +10 V ADJ | NC | +10 V ADJ | NC | -10 V ADJ | PWR GND |
| 13 | +10 V OUT | NC | +10 V OUT | -IN | -10 V OUT | -IN |
| 14 | +10 V ADJ | NC | +10 V ADJ | V _O FORCE | -10 V ADJ | V _O FORCE |
| 15 | | NC | | -10 V REF OUT | | V _O SENSE |
| 16 | | NC | | V _O SENSE | | V _O SENSE |
| 17 | | NC | | +10 V IN | | NC |
| 18 | | V _Z | | V _Z | | V _Z |
| 19 | | ZENER GND | | ZENER GND | | ZENER GND |
| 20 | | NC | | NC | | NC |
| 21 | | NC | | NC | | NC |
| 22 | | V _{OS} | | V _{OS} | | NC |
| 23 | | V _{OS} | | V _{OS} | | NC |
| 24 | | POWER GND | | POWER GND | | NC |
| 25 | | V _{CC} | | V _{CC} | | NC |
| 26 | | +IN | | +IN | | NC |
| 27 | | V _O FORCE | | V _O FORCE | | NC |
| 28 | | +10 V REF OUT | | +10 V REF OUT | | NC |

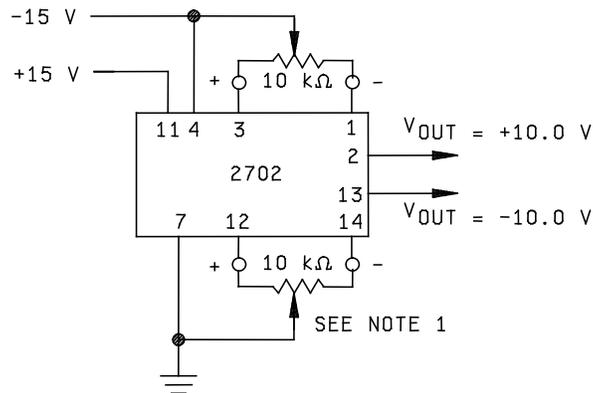
FIGURE 2. Terminal connections.

| | | | |
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| STANDARD MICROCIRCUIT DRAWING DLA LAND AND MARITIME COLUMBUS, OHIO 43218-3990 | SIZE A | | 85030 |
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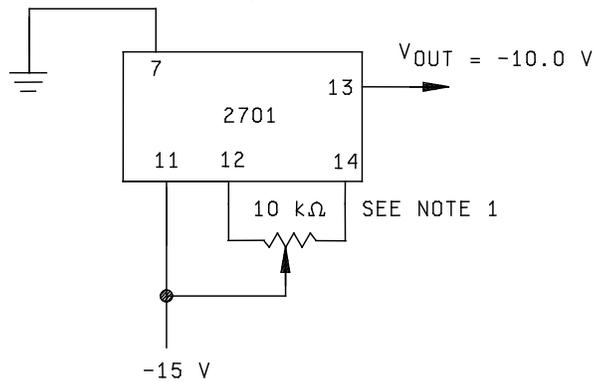
Device types 01 and 02.



Device types 03 and 04.



Device types 05 and 06.



NOTES:

1. External 10 kΩ potentiometer provides a ±20 mV minimum output offset adjust. Temperature effect is 4 μV/°C per mV of offset correction (external adjustment optional).
2. Dual-in-line package only.

FIGURE 3. Trim circuit(s).

**STANDARD
MICROCIRCUIT DRAWING**

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TABLE II. Electrical test requirements.

| MIL-PRF-38534 test requirements | Subgroups (in accordance with MIL-PRF-38534, group A test table) |
|--|---|
| Interim electrical parameters | --- |
| Final electrical parameters | 1*, 2, 3, 4 |
| Group A test requirements | 1, 2, 3, 4, 5, 6 |
| Group C end-point electrical <u>1/</u> parameters | 1, 2, 3 |

* PDA applies to subgroup 1.

1/ As a minimum, for all Group C testing performed after 14-09-18 manufacturers shall perform subgroups 1, 2, and 3 from the Group A electrical test table (Table C-Xa of MIL-PRF-38534).

4.3 Conformance and periodic inspections. Conformance inspection (CI) and periodic inspection (PI) shall be in accordance with MIL-PRF-38534 and as specified herein.

4.3.1 Group A inspection (CI). Group A inspection shall be in accordance with MIL-PRF-38534 and as follows:

- a. Tests shall be as specified in table II herein.
- b. Subgroups 7, 8, 9, 10, and 11 shall be omitted.

4.3.2 Group B inspection (PI). Group B inspection shall be in accordance with MIL-PRF-38534.

4.3.3 Group C inspection (PI). Group C inspection shall be in accordance with MIL-PRF-38534 and as follows:

- a. End-point electrical parameters shall be as specified in table II herein.
- b. Steady-state life test, method 1005 of MIL-STD-883.
 - (1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to either DLA Land and Maritime -VA or the acquiring activity upon request. Also, the test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in method 1005 of MIL-STD-883.
 - (2) T_A as specified in accordance with table I of method 1005 of MIL-STD-883.
 - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

4.3.4 Group D inspection (PI). Group D inspection shall be in accordance with MIL-PRF-38534.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-PRF-38534.

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| STANDARD MICROCIRCUIT DRAWING DLA LAND AND MARITIME COLUMBUS, OHIO 43218-3990 | SIZE A | | 85030 |
| | | REVISION LEVEL J | SHEET 11 |

6. NOTES

6.1 Intended use. Microcircuits conforming to this drawing are intended for use for Government microcircuit applications (original equipment), design applications, and logistics purposes.

6.2 Replaceability. Microcircuits covered by this drawing will replace the same generic device covered by a contractor-prepared specification or drawing.

6.3 Configuration control of SMD's. All proposed changes to existing SMD's will be coordinated as specified in MIL-PRF-38534.

6.4 Record of users. Military and industrial users shall inform DLA Land and Maritime when a system application requires configuration control and the applicable SMD to that system. DLA Land and Maritime will maintain a record of users and this list will be used for coordination and distribution of changes to the drawings. Users of drawings covering microelectronic devices (FSC 5962) should contact DLA Land and Maritime-VA, telephone (614) 692-8108.

6.5 Comments. Comments on this drawing should be directed to DLA Land and Maritime-VA, Columbus, Ohio 43218-3990, or telephone (614) 692-1081.

6.6 Sources of supply. Sources of supply are listed in MIL-HDBK-103 and QML-38534. The vendors, listed in MIL-HDBK-103 and QML-38534, have submitted a certificate of compliance (see 3.7 herein) to DLA Land and Maritime-VA and have agreed to this drawing.

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STANDARD MICROCIRCUIT DRAWING BULLETIN

DATE: 14-09-18

Approved sources of supply for SMD 85030 are listed below for immediate acquisition information only and shall be added to MIL-HDBK-103 and QML-38534 during the next revisions. MIL-HDBK-103 and QML-38534 will be revised to include the addition or deletion of sources. The vendors listed below have agreed to this drawing and a certificate of compliance has been submitted to and accepted by DLA Land and Maritime -VA. This information bulletin is superseded by the next dated revisions of MIL-HDBK-103 and QML-38534. DLA Land and Maritime maintains an online database of all current sources of supply at <http://www.landandmaritime.dla.mil/Programs/Smcr/>.

| Standard microcircuit drawing PIN <u>1/</u> | Vendor CAGE number | Vendor similar PIN <u>2/</u> |
|---|---|---|
| 8503001CX 8503001XX 8503001YX 8503001YA 85030013A 8503001YA | <u>3/</u> <u>3/</u> <u>3/</u> 27851 27851 <u>3/</u> | HS2700SD 2700SD/883B HS2700SD HC2700SD/883B HC2700SLCC/883B AD2700SD/883B |
| 8503002CX 8503002XX 8503002YX 8503002YA 85030023A 8503002YA | <u>3/</u> <u>3/</u> <u>3/</u> 27851 27851 <u>3/</u> | HS2700UD 2700UD/883B HS2700UD HC2700UD/883B HC2700ULCC/883B AD2700UD/883B |
| 8503003CX 8503003XX 8503003YX 8503003YA 85030033A 8503003YA | <u>3/</u> <u>3/</u> <u>3/</u> 27851 27851 34031 | HS2702SD 2702SD/883B HS2702SD HC2702SD/883B HC2702SLCC/883B AD2702SD/883B |
| 8503004CX 8503004XX 8503004YX 8503004YA 85030043A 8503004YA 8503004YC | <u>3/</u> <u>3/</u> <u>3/</u> 27851 27851 34031 <u>3/</u> | HS2702UD 2702UD/883B HS2702UD HC2702UD/883B HC2702ULCC/883B AD2702UD/883B AD2702UD/883B |

- 1/ The lead finish shown for each PIN, representing a hermetic package, is the most readily available from the manufacturer listed for that part. If the desired lead finish is not listed contact the Vendor to determine availability.
- 2/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.
- 3/ Not available from an approved source.

STANDARD MICROCIRCUIT DRAWING BULLETIN - Continued.

DATE: 14-09-18

| Standard microcircuit drawing PIN <u>1/</u> | Vendor CAGE number | Vendor similar PIN <u>2/</u> |
|--|--|--|
| 8503005CX 8503005XX 8503005YX 8503005YA 85030053A 8503005YA | <u>3/</u> <u>3/</u> <u>3/</u> 27851 27851 <u>3/</u> | HS2701SD 2701SD/883B HS2701SD HC2701SD/883B HC2701SLCC/883B AD2701SD/883B |
| 8503006CX 8503006XX 8503006YX 8503006YA 85030063A 8503006YC | <u>3/</u> <u>3/</u> <u>3/</u> 27851 27851 <u>3/</u> | HS2701UD 2701UD/883B HS2701UD HC2701UD/883B HC2701ULCC/883B AD2701UD/883B |

- 1/ The lead finish shown for each PIN, representing a hermetic package, is the most readily available from the manufacturer listed for that part. If the desired lead finish is not listed contact the Vendor to determine availability.
- 2/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.
- 3/ Not available from an approved source.

Vendor CAGE
number

Vendor name
and address

27851

Spectrum Microwave Incorporated
400 Nickerson Road
Marlborough, MA 01752-3035

34031

Analog Devices
7910 Triad Center Drive
Greensboro, NC 27409-9758

The information contained herein is disseminated for convenience only and the Government assumes no liability whatsoever for any inaccuracies in the information bulletin.