		REVISIONS		
LTR	DESCRIPTION		DATE (YR-MO-DA)	APPROVED
G	Changes IAW NOR 5962-R081-95.		95-03-01	K. Cottongim
H	Added device types 11 through 13. Made technical changes to table I. Redrew entire document		97-08-27	K. Cottongim

REV																	
SHEET																	
REV	H	H	H														
SHEET	15	16	17														

REV STATUS OF SHEETS		REV	H	H	H	H	H	H	H	H	H	H	H	H	H	H
		SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14

PMIC N/A

STANDARD MICROCIRCUIT DRAWING

THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE

AMSC N/A

DEFENSE SUPPLY CENTER COLUMBUS
COLUMBUS, OHIO 43216-5000

MICROCIRCUIT, HYBRID, LINEAR, 11.8 - VOLT, RESOLVER TO DIGITAL CONVERTER

SIZE	CAGE CODE	5962-89908
A	67268	

SHEET 1 OF 17

DESC FORM 2233
APR 97

5962-E265-97

9004708 0030330 796

1. SCOPE

1.1 <u>Scope</u>. This drawing describes device requirements for class H hybrid microcircuits to be processed in accordance with MIL-PRF-38534.

1.2 <u>Part or Identifying Number (PIN)</u>. The complete PIN shall be as shown in the following example:

<u>5962-89908</u>   <u>01</u>   <u>X</u>   <u>X</u>

| Drawing number | Device type (see 1.2.1) | Case outline (see 1.2.2) | Lead finish (see 1.2.3) |

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

Device type	Generic number	Circuit function	Accuracy (± 1.0 LSB)
01	SDC14565-114	11.8 V, 400 Hz, R/D converter	2.0 minutes
02	SDC14565-115	11.8 V, 400 Hz, R/D converter	1.0 minute
03	SDC14565-616	11.8 V, 400 Hz, 80 Hz bandwidth, R/D converter	2.0 minutes
04	SDC14566-115	11.8 V, 400 Hz, trimmed velocity, R/D converter	1.0 minute
05	SDC14565-618	7.0 V, 400 Hz, 80 Hz bandwidth, R/D converter	2.0 minutes
06	HRD1066-341H/2	11.8 V, 400 Hz, R/D converter	2.0 minutes
07	HRD1066-341V/2	11.8 V, 400 Hz, R/D converter	1.0 minute
08	HRD1066-C782/2	11.8 V, 400 Hz, 80 Hz bandwidth, R/D converter	2.0 minutes
09	SDC14565-602	11.8 V, 2.4 kHz, R/D converter	1.0 minute
10	SDC14565-603	11.8 V, 2.4 kHz, R/D converter	2.0 minutes
11	SDC14565-112	11.8 V, 400 Hz, R/D converter	4.0 minutes
12	SDC14566-112	11.8 V, 400 Hz, trimmed velocity, R/D converter	4.0 minutes
13	SDC14566-114	11.8 V, 400 Hz, trimmed velocity, R/D converter	2.0 minutes

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

Outline letter	Descriptive designator	Terminals	Package style
X	See figure 1	36	Dual-in-line
Y	See figure 1	36	Flat package
Z	See figure 1	36	Dual-in-line

1.2.3 <u>Lead finish</u>. The lead finish shall be as specified in MIL-PRF-38534. Finish letter "X" shall not be marked on the microcircuit or its packaging. The "X" designation is for use in specifications when lead finishes A, B, and C are considered acceptable and interchangeable without preference.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE **A**		**5962-89908**
		REVISION LEVEL H	SHEET 2

DESC FORM 2234
APR 97

9004708 0030331 622

1.3 Absolute maximum ratings. 1/

Positive supply voltage (V_{CC}) .... +18 V dc
Negative supply voltage (V_{EE}) .... -18 V dc
Logic supply voltage (V_{DD}) .... +7.0 V dc
Reference input voltage .... 130 V rms
Digital input voltage range .... -0.3 V dc to +7.0 V dc
Power dissipation, T_C = +125°C (P_D) .... 720 mW
Storage temperature range .... -65°C to +150°C
Lead temperature (soldering, 10 seconds) .... +300°C
Thermal resistance, junction-to-case (θ_{JC}) .... 8.0°C/W
Thermal resistance, junction-to-ambient (θ_{JA}) .... 20°C/W

1.4 Recommended operating conditions.

Positive supply voltage range (V_{CC}) .... +14.25 V dc to +15.75 V dc
Negative supply voltage range (V_{EE}) .... -14.25 V dc to -15.75 V dc
Logic supply voltage range (V_{DD}) .... +4.5 V dc to +5.5 V dc
Case operating temperature range (T_C) .... -55°C to +125°C

2. APPLICABLE DOCUMENTS

2.1 Government specification and standards. Unless otherwise specified, the following specification and standards of the issue listed in that issue of the Department of Defense Index of Specifications and Standards specified in the solicitation, form a part of this drawing to the extent specified herein.

SPECIFICATION

PERFORMANCE

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

STANDARDS

MILITARY

MIL-STD-883   - Test Methods and Procedures for Microelectronics.
MIL-STD-1835 - Microcircuit Case Outlines.

(Copies of the specification and standards required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

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 shall take precedence.

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

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-89908
		REVISION LEVEL H	SHEET 3

DESC FORM 2234
APR 97

3. REQUIREMENTS

3.1 <u>Item requirements</u>. The individual item requirements shall be in accordance with MIL-PRF-38534 and as specified herein.

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

3.2.1 <u>Case outline(s)</u>. The case outline(s) shall be in accordance with 1.2.2 herein and on figure 1.

3.2.2 <u>Terminal connections</u>. The terminal connections shall be as specified on figure 2.

3.2.3 <u>Timing diagram(s)</u>. The timing diagram(s) shall be as specified on figure 3.

3.3 <u>Electrical performance characteristics</u>. 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 <u>Electrical test requirements</u>. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table I.

3.5 <u>Marking</u>. Marking shall be in accordance with MIL-PRF-38534. The part shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's PIN may also be marked as listed in QML-38534 (see 6.6 herein).

3.6 <u>Manufacturer eligibility</u>. In addition to the general requirements of MIL-PRF-38534, the manufacturer of the part described herein shall maintain the electrical test data (variables format) from the initial quality conformance inspection group A lot sample, produced on the certified line, for each device type listed herein. The data should also 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 (DSSC-VA) upon request.

3.7 <u>Certificate of compliance</u>. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in QML-38534 (see 6.6 herein). The certificate of compliance submitted to DSSC-VA prior to listing as an approved source of supply shall affirm that the manufacturer's product meets the requirements of MIL-PRF-38534 and the requirements herein.

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

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE **A**		5962-89908
		REVISION LEVEL H	SHEET 4

DESC FORM 2234
APR 97

■ 9004708 0030333 4T5 ■

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions 1/ -55°C ≤ T_C ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
Resolution control 2/	RC	A = B = 0.8 V	7,8A,8B	All	10	10	Bits
		A = 2.0 V, B = 0.8 V			12	12	
		A = 0.8 V, B = 2.0 V			14	14	
		A = B = 2.0 v			16	16	
Differential linearity	DL	3/		All	-1.0	+1.0	LSB
Accuracy repeatability	AR	3/		All	-1.0	+1.0	LSB
Output Accuracy	AOUT	4/	4,5,6	01,03, 05,06, 08,10, 13	-7.0	+7.0	LSB
				11,12	-12	+12	
				02,04, 07,09	-4.0	+4.0	
Reference synthesizer	RS	Reference phase shift between the converter signal and reference 3/ inputs		All	-45	+45	Degree
Reference input impedance	Z_{IN1}	Single ended 3/		01,02, 03,04, 06,07, 08,09, 10,11, 12,13	100		kΩ
				05	50		
		Differential 3/		01,02, 03,04, 06,07, 08,09, 10,11, 12,13	250		
				05	100		

See footnotes at end of table.

	SIZE		5962-89908
STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	**A**	REVISION LEVEL H	SHEET 5

DESC FORM 2234
APR 97

■ 9004708 0030334 331 ■

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ -55°C ≤ T_C ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
Reference input common mode range	CMR_1	3/		All	-210	+210	Vpk
Signal input impedence	Z_{IN2}	Single ended 3/		All	23		kΩ
		Differential 3/			46		
Signal input common mode range	CMR_2	3/		01,02,03, 04,05,09, 10,11,12, 13	-60	+60	V
				06,07,08	-25	+25	
Digital output low 2/ voltage	V_{OL}	I_{OL} = -1.6 mA, output bits 1 through 16, and BIT	1,2,3	All		0.4	V
Digital output high 2/ voltage	V_{OH}	I_{OH} = -100 µA, output bits 1 through 16, and BIT	1,2,3	All	2.8		V
Output leakage current (high impedance) 2/	I_Z	Output bits 1 through 16	1,2,3	All	-30	+30	µA
Digital output delay, converter busy	t_{CB}	Positive pulse, see figure 3	7,8A,8B	01,02,03, 04,05,09, 10,11,12, 13	0.4	1.0	µs
				06,07, 08	0.4	2.0	
Digital output error detection 2/ (built-in-test)	BIT	Logic 0 indicates fault, minimum error for bit condition	7,8A,8B	All	20	100	LSB

See footnotes at end of table.

9004708 0030335 278

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ -55°C ≤ T$_C$ ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits Min	Limits Max	Unit
Analog output error 4/	e$_{OUT}$	All analog 10-bit mode outputs loaded with a resistor of ≤ 10 kΩ to ground	7,8A,8B	01,02,03, 04,05,09, 10,11,12, 13	42.5	57.5	mV rms /LSB
				06,07, 08	35.0	65.0	
		12-bit mode		01,02,03, 04,05,09, 10,11,12, 13	21.25	28.75	
				06,07, 08	17.0	33.0	
		14-bit mode		01,02,03, 04,05,09, 10,11,12, 13	10.63	14.38	
				06,07, 08	8.7	16.3	
Analog output error - continued 4/	e$_{OUT}$	All analog outputs loaded with a ≤ 10 kΩ resistor ground 16-bit mode	7, 8A,8B	01,02,03, 04,05,09, 10,11,12, 13	5.31	7.19	mV rms /LSB
				06,07, 08	4.4	8.2	
Analog output offset voltage	V$_{OS}$	V$_{OUT}$ at zero speed 5/	4,5,6	01-08,11, 12,13		40	mV
				09		25	
				10		50	
Analog output positive linearity error 6/	EUP	5/	4,5,6	01,02,03, 05,11		2.0	%
				09		1.0	
				10		3.0	
				04,12,13		0.7	
			4	06,07, 08		2.0	
			5,6			4.0	

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-89908
		REVISION LEVEL H	SHEET 7

DESC FORM 2234
APR 97

9004708 0030336 104

TABLE I. Electrical performance characteristics - Continued.

| Test	Symbol	Conditions 1/ -55°C ≤ T_C ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits Min	Limits Max	Unit
Analog output negative linearity error 6/	EUN	5/	4,5,6	01,02, 03,05,11		2.0	%
				09		1.0	
				10		3.0	
				04,12,13		0.7	
			4	06,07, 08		2.0	
			5,6			4.0	
Analog output reversal error	EB	Difference between positive and negative linearity 5/	4,5,6	01,02, 03,05,11		2.0	%
				09		1.0	
				10		3.0	
				04,12,13		0.7	
			4	06,07, 08		3.0	
			5,6			4.0	
Analog output scale factor	SF	Slope of the linearity line 5/ 7/ A = B = 2.0 V dc	4,5,6	01-08, 11,12,13		15	%
				09		1.0	
				10		3.0	
Digital input high voltage	V_{IH}	$\overline{INH}$, $\overline{EL}$, $\overline{EM}$, $\overline{S}$, A, B, and digital bits 1 through 16 while in CT mode	7,8A,8B	All	2.4		V
Digital input low voltage	V_{IL}		7,8A,8B	All		0.8	V
Inhibit ($\overline{INH}$) voltage 2/	V_{INH}	No digital angles change while INH is logic 0 and analog input is rotating	7,8A,8B	All		0.8	V
Enable voltage 2/	V_E	$\overline{EM}$ controls output bit 1 through 8 and $\overline{EL}$ controls output bits 9 through 16	7,8A,8B	All		0.8	V
Disable voltage 2/ (high impedence)	V_D		7,8A,8B	All	2.0		V
Set ($\overline{S}$) voltage 2/	$V_{\overline{S}}$	For use in CT mode	7,8A,8B	01,02, 03,04, 05,09, 10,11, 12,13		0.8	V

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-89908
		REVISION LEVEL H	SHEET 8

DESC FORM 2234
APR 97

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ -55°C ≤ T_C ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
Positive supply current	I_{CC}		1,2,3	All		25	mA
Negative supply current	I_{EE}		1,2,3	All		-15	mA
Logic supply current	I_{DD}		1,2,3	All		10	mA
Bandwidth	BW		7,8A,8B	06,07, 09,10	38	70	Hz
				03,05, 08	56	104	
		16 bit and 14 bit modes		01,02, 04,11, 12,13	38	70	
		12 bit and 10 bit modes		01,02, 04,11, 12,13	154	286	

1/ Unless otherwise specified all tests are performed at nominal power supply voltages.

2/ These parameters are tested on a go-no-go basis only or in conjunction with other measured parameters and are not directly testable.

3/ Guaranteed by design, but not tested. Parameter shall be guaranteed to limits specified in table I for all lots not specifically tested.

4/ Tested in 16-bit mode only. 10, 12, and 14-bit mode operations are guaranteed by design and are not tested.

5/ Tests are performed in 12-bit resolution with a full speed of 400 Hz. Velocity data is measured at multiples of full scale 3/4, 1/2, 1/4, and ±0 of the rated full speed.

6/ Analog output linearity error is defined as the best straight line from zero speed, to either positive or negative direction as applicable, that yields the lowest peak error readings.

7/ For device types 01 through 08 and 11 through 13, velocity output scaling (16-bit mode) is 900°/second equals 10 volts. For device types 09 and 10, velosity output scaling (16-bit mode) is 120°/second equals 10 volts.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE **A**		5962-89908
		REVISION LEVEL H	SHEET 9

DESC FORM 2234
APR 97

Case outline X
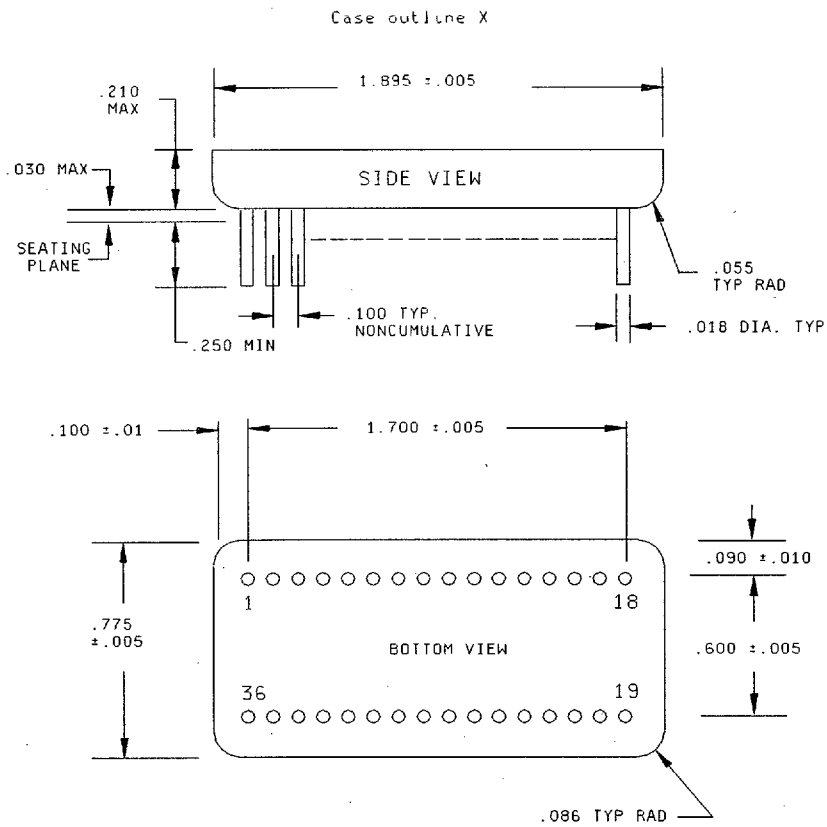
Inches	mm	Inches	mm
.002	0.05	.100	2.54
.005	0.13	.210	5.33
.010	0.25	.250	6.35
.018	0.46	.600	15.24
.030	0.76	.775	19.69
.055	1.40	1.700	43.18
.086	2.18	1.895	48.13
.090	2.29		

NOTES:
1. Dot on package lid indicates pin 1.
2. Dimensions are in inches.
3. Metric equivalents are given for information only.
4. Lead identification numbers are for reference only.
5. Lead spacing dimensions apply only at seating plane.
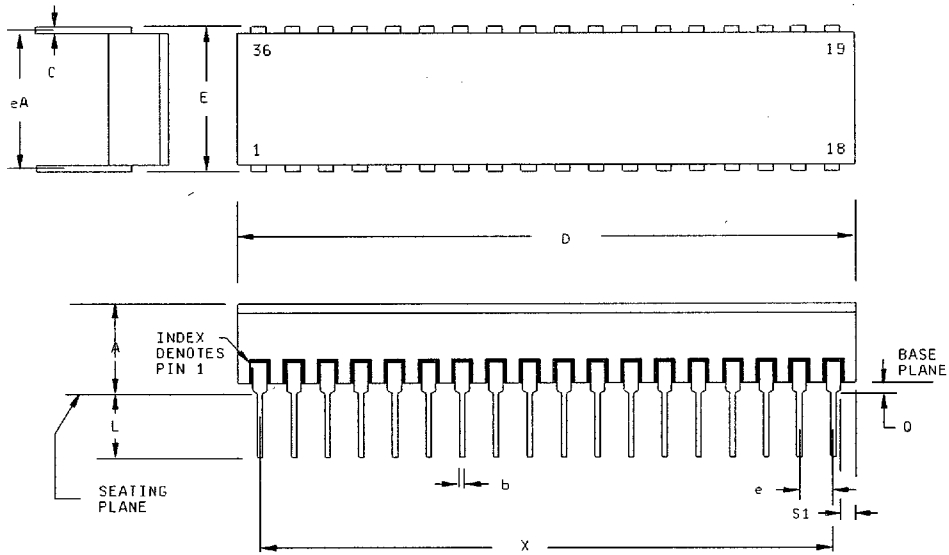
FIGURE 1. Case outlines.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-89908
		REVISION LEVEL H	SHEET 10

9004708 0030339 913

Case outline Y


```
                           .100 TYP

1.895 MAX          TOP VIEW        17 EQUAL SPACES
                                   AT .100 = 1.700
.015                                  TOLERANCE
TYP                                 NONCUMULATIVE

          .775
          MAX              .500 MIN
.210 MAX
.010
±.002           END VIEW
                           .085
```
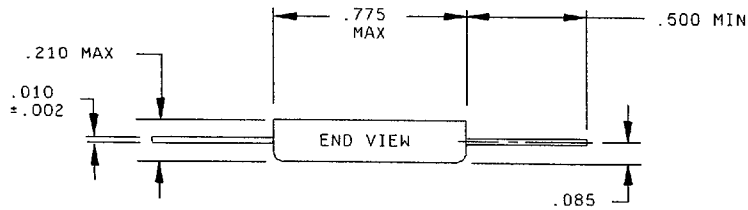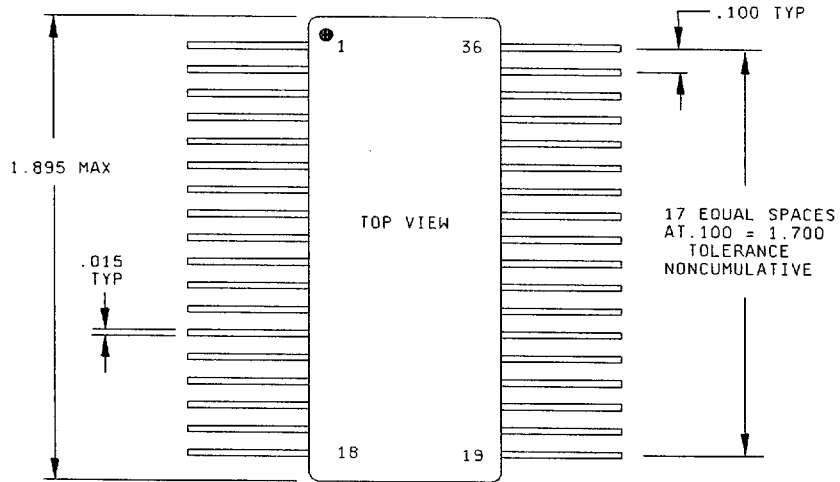
Inches	mm
.002	0.05
.010	0.25
.015	0.38
.085	2.16
.100	2.54
.210	5.33
.500	12.70
.775	19.69
1.700	43.18
1.895	48.13

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ±.005 inch (0.13 mm).
4. Lead identification numbers are for reference only.

FIGURE 1. Case outlines - Continued.

Case outline Z

FIGURE 1. Case outlines - Continued.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE **A**		**5962-89908**
		REVISION LEVEL H	SHEET **12**

DESC FORM 2234
APR 97

Case outline Z - Continued

Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A		5.33		0.210
b	0.41	0.51	0.016	0.020
c	0.41	0.51	0.016	0.020
D		48.26		1.900
e	2.54 BSC		0.100 BSC	
E		20.32		0.800
e_A	15.11	15.37	0.595	0.605
L	6.10	6.60	0.240	0.260
Q		0.72		0.030
S1	2.18	2.44	0.086	0.096
X	43.18 BSC		1.700 BSC	

NOTES:
1. The U.S. government preferred system of measurement is the metric SI. This item was designed using inch-pound units of measurement. In case of problems involving conflicts between the metric and inch-pound units, the inch-pound units shall rule.
2. Pin numbers are for reference only.
3. Lead clusters to be located within ±0.005 inch (1.27 mm) of case center line.

FIGURE 1. Case outline(s) - Continued.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-89908
		REVISION LEVEL H	SHEET 13

9004708 0030342 408

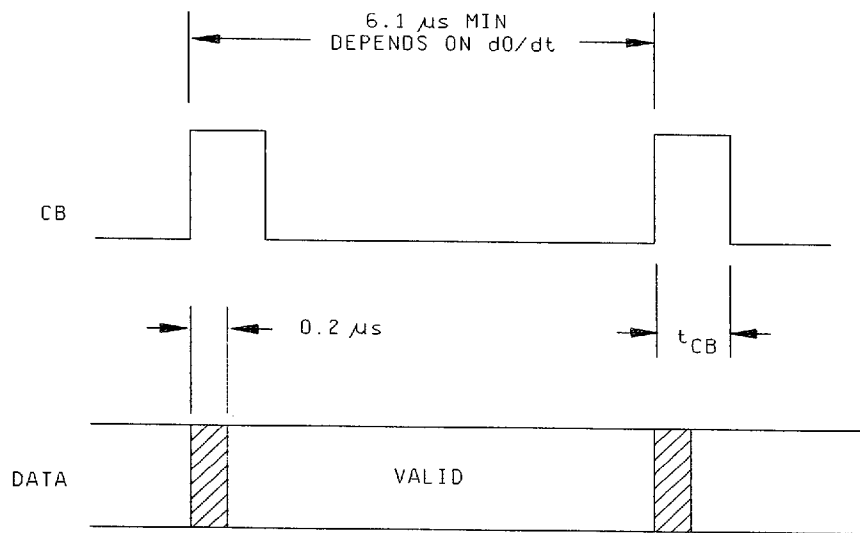| Device types	All	01,02,04	01,02,03,04,05,09,10	Device types	All	01,02,04	01,02,03,04,05,09,10
Case outlines	X	Y	Z	Case outlines	X	Y	Z
Terminal number	Terminal symbol			Terminal number	Terminal symbol		
1	S1(R)			19	RH		
2	S2(R)			20	RL		
3	S3(R)			21	BIT-15		
4	S4(R)			22	BIT-16(LSB,16-BIT MODE)		
5	BIT-1 (MSB)			23	VEL		
6	BIT-2			24	CB		
7	BIT-3			25	$\overline{EL}$		
8	BIT-4			26	$\overline{EM}$		
9	BIT-5			27	e		
10	BIT-6			28	+5 V or (V_{DD})		
11	BIT-7			29	GROUND		
12	BIT-8			30	$\overline{S}$ or NC (see note)		
13	BIT-9			31	-15 V or (V_{EE})		
14	BIT-10(LSB,10-BIT MODE)			32	+15 V or (V_{CC})		
15	BIT-11			33	$\overline{INH}$		
16	BIT-12(LSB,12-BIT MODE)			34	$\overline{BIT}$		
17	BIT-13			35	A		
18	BIT-14(LSB,14-BIT MODE)			36	B		

NOTE: Terminal number 30 is $\overline{S}$ for device types 01, 02, 03, 04, 05, 09 - 13; NC for device types 06, 07, and 08.

FIGURE 2. Terminal connections.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE **A**		5962-89908
		REVISION LEVEL H	SHEET **14**

DESC FORM 2234
APR 97

■ 9004708 0030343 344 ■

6.1 μs MIN
DEPENDS ON dO/dt

CB

0.2 μs

t_{CB}

DATA

VALID

CONVERTER BUSY, (CB).

FIGURE 3. Timing diagram(s).

9004708 0030344 280

TABLE II. Electrical test requirements.

MIL-PRF-38534 test requirements	Subgroups (in accordance with MIL-PRF-38534, group A test table)
Interim electrical parameters	1,4,7
Final electrical test parameters	1*,2,3,4,5,6,7,8A,8B
Group A test requirements	1,2,3,4,5,6,7,8A,8B
Group C end-point electrical parameters	1,2,3,4,7

* PDA applies to subgroup 1.

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-PRF-38534.

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 DSCC-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 test 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.

4.3 Quality conformance inspection. Quality conformance inspection shall be in accordance with MIL-PRF-38534 and as specified herein.

4.3.1 Group A inspection. 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 9, 10, and 11 shall be omitted.

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

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE A		5962-89908
		REVISION LEVEL H	SHEET 16

■ 9004708 0030345 117 ■

4.3.3 <u>Group C inspection</u>. 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 DSCC-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 test 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 <u>Group D inspection</u>. Group D inspection shall be in accordance with MIL-PRF-38534.

5. PACKAGING

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

6. NOTES

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

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

6.3 <u>Configuration control of SMD's</u>. All proposed changes to existing SMD's will be coordinated with the users of record for the individual documents. This coordination will be accomplished in accordance with MIL-STD-973 using DD Form 1692, Engineering Change Proposal.

6.4 <u>Record of users</u>. Military and industrial users shall inform Defense Supply Center Columbus when a system application requires configuration control and the applicable SMD. DSCC 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 microelectronics devices (FSC 5962) should contact DSCC-VA, telephone (614) 692-0525.

6.5 <u>Comments</u>. Comments on this drawing should be directed to DSCC-VA, Columbus, Ohio 43216-5000, or telephone (614) 692-0512.

6.6 <u>Approved sources of supply</u>. Approved sources of supply are listed in QML-38534. Additional sources will be added to QML-38534 as they become available. The vendors listed in QML-38534 have agreed to this drawing and a certificate of compliance (see 3.7 herein) has been submitted to and accepted by DSCC-VA.

STANDARD MICROCIRCUIT DRAWING DEFENSE SUPPLY CENTER COLUMBUS COLUMBUS, OHIO 43216-5000	SIZE **A**		5962-89908
		REVISION LEVEL H	SHEET **17**

DESC FORM 2234
APR 97

■ �९004708 0030346 053 ■

STANDARD MICROCIRCUIT DRAWING SOURCE APPROVAL BULLETIN

DATE: 97-08-27

Approved sources of supply for SMD 5962-89908 are listed below for immediate acquisition only and shall be added to QML-38534 during the next revision. 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 DSCC-VA. This bulletin is superseded by the next dated revision of QML-38534.

Standard microcircuit drawing PIN 1/	Vendor CAGE number	Vendor similar PIN 2/
5962-8990801XC	19645	SDC-14565-114
5962-8990801XA	19645	SDC-14565-144
5962-8990801YC	19645	SDC-14565-629
5962-8990801ZC	3/	SDC-14565-621
5962-8990802XC	19645	SDC-14565-115
5962-8990802XA	19645	SDC-14565-145
5962-8990802YC	19645	SDC-14565-630
5962-8990802ZC	3/	SDC-14565-622
5962-8990803XC	19645	SDC-14565-616
5962-8990803ZC	3/	SDC-14565-616
5962-8990804XC	19645	SDC-14566-115
5962-8990804XA	19645	SDC-14566-145
5962-8990804YC	19645	SDC-14566-609
5962-8990804ZC	3/	SDC-14566-611
5962-8990805XC	19645	SDC-14565-618
5962-8990805ZC	3/	SDC-14565-618
5962-8990806XX	3/	HRD1066-341H/2
5962-8990806YX	3/	HRD1066-341H/2
5962-8990807XX	3/	HRD1066-341V/2
5962-8990807YX	3/	HRD1066-341V/2
5962-8990808XX	3/	HRD1066-C782/2
5962-8990808YX	3/	HRD1066-C782/2

1/ The lead finish shown for each PIN representing a hermetic package is the most readily available from the manufacturer listed for the part. If the lead finish desired is not listed contact the vendor to determine its 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 a QML supplier.

9004708 0030347 T9T

Standard microcircuit drawing PIN 1/	Vendor CAGE number	Vendor similar PIN 2/
5962-8990809XC	19645	SDC-14565-602
5962-8990809ZC	3/	SDC-14565-602
5962-8990810XC	19645	SDC-14565-603
5962-8990810ZC	3/	SDC-14565-603
5962-8990811XC	19645	SDC-14565-112
5962-8990811XA	19645	SDC-14565-142
5962-8990812XC	19645	SDC-14566-112
5962-8990812XA	19645	SDC-14566-142
5962-8990813XC	19645	SDC-14566-114
5962-8990813XA	19645	SDC-14566-144

Vendor CAGE number	Vendor name and address
19645	ILC Data Device Corporation 105 Wilbur Place Bohemia, NY 11716-2482

9004708 0030348 92b