REVISIONS			
LTR	DESCRIPTION	DATE (YR-MO-DA)	APPROVED
A	Add vendor CAGE 09059. Changed table I, parameters RC, CMR_2, e_{OUT}, and footnote 7. Figure 2, change terminal number 30.	90-10-23	W. Heckman
B	Change CMR_2 maximum limit and test condition (load resistance) for e_{OUT}. Editorial changes throughout. Added device types 04, 05, and 06.	91-05-16	W. Heckman
C	Added maximum junction temperature to maximum operating conditions. Changed output leakage current in table I. Corrected dimensions in figure 1. Editorial changes throughout.	92-06-18	G. A. Lude
D	Add case outline Y. Rewrite entire document.	93-10-15	K. A. Cottongim
E	Changes made in accordance with NOR 5962-R112-94.	94-02-09	K. A. Cottongim
F	Added device types 07 and 08. Rewrote entire document.	95-06-26	K. A. Cottongim
G	Changes made in accordance with NOR 5962-R027-96.	96-01-18	K. A. Cottongim
H	Changes to table I.	97-06-24	K. A. Cottongim

REV																				
SHEET																				
REV	H	H																		
SHEET	15	16																		

REV STATUS OF SHEETS															
REV	H	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

PREPARED BY
Donald R. Osborne

CHECKED BY
Gary Zahn

APPROVED BY
William K. Heckman

DRAWING APPROVAL DATE
90-02-23

REVISION LEVEL
H

DEFENSE SUPPLY CENTER COLUMBUS
P. O. BOX 3990
COLUMBUS, OHIO 43216-5000

MICROCIRCUIT, HYBRID, LINEAR, 11.8 VOLT, SYNCHRO TO DIGITAL CONVERTER

SIZE	CAGE CODE	
A	**67268**	**5962-89499**

SHEET 1 OF 16

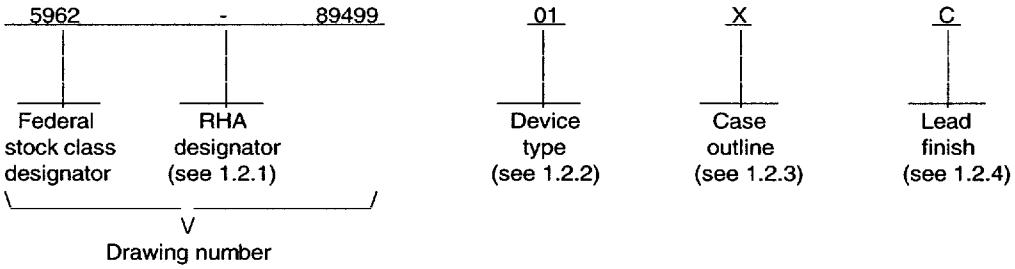
DSCC FORM 2233
APR 97

5962-E102-97

1. SCOPE

1.1 Scope. This drawing documents product assurance class H and a choice of case outlines and lead finishes are available and are reflected in the Part or Identifying Number (PIN). When available, a choice of radiation hardness assurance levels are reflected in the PIN.

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



1.2.1 Radiation hardness assurance (RHA) designator. Device class H marked devices shall meet the MIL-PRF-38534 specified RHA levels and shall be marked with the appropriate RHA designator. A dash (-) indicates a non-RHA device.

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

Device type	Generic number	Circuit function	Accuracy (±1.0 LSB)
01	SDC14560-114	11.8 V, 400 Hz, S/D converter	2.0 minutes
02	SDC14560-115	11.8 V, 400 Hz, S/D converter	1.0 minute
03	SDC14560-605	11.8 V, 400 Hz, 80 Hz bandwidth, S/D converter	2.0 minutes
04	HSD1066-341H/2	11.8 V, 400 Hz, S/D converter	2.0 minutes
05	HSD1066-341V/2	11.8 V, 400 Hz, S/D converter	1.0 minute
06	HSD1066-C778H/2	11.8 V, 400 Hz, 80 Hz bandwidth, S/D converter	2.0 minutes
07	SDC14560-112	11.8V, 400 Hz, S/D converter	4.0 minutes
08	SDC14560-111	11.8V, 400 Hz, S/D converter	6.0 minutes

1.2.3 Case outline(s). 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 1/	See figure 1	36	Dual-in-line

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

1/ Do not use for new design.

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 (P_D), T_C = +125°C	720 mW
Storage temperature range	-65°C to +150°C
Maximum junction temperature (T_{Jmax})	+130°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, standards, and handbook. The following specification, standards, and handbook form a part of this drawing to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solitation.

SPECIFICATION

DEPARTMENT OF DEFENSE

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

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-883 - Test Methods and Procedures for Microelectronics.
MIL-STD-973 - Configuration Management.
MIL-STD-1835 - Microcircuit Case Outlines.

HANDBOOK

DEPARTMENT OF DEFENSE

MIL-HDBK-780 - Standard Microcircuit Drawings.

(Unless otherwise indicated, copies of the specification, standards, and handbook are available 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.

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.

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. Therefore, the tests and inspections herein may not be performed for the applicable device class (see MIL-PRF-38534). Futhermore, the manufacturers may take exceptions or use alternate methods to the tests and inspections herein and not perform them. However, the performance requirements as defined in MIL-PRF-38534 shall be met 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.

3.2.1 Case outline(s). The case outline(s) shall be in accordance with 1.2.4 herein and figure 1.

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

3.2.4 Timing diagram(s). The timing diagram(s) 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 as listed in QML-38534.

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 (DSCC-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 DSCC-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. QUALITY ASSURANCE PROVISIONS

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.

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Device types	Group A subgroups	Limits		Unit
					Min	Max	
Resolution control	RC	2/ A = B = 0.8 V	All	7,8A,8B	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	
Accuracy repeatability	AR	3/	All	7,8A,8B	-1.0	+1.0	LSB
Differential linearity	DL	3/	01, 02, 03,07,08	7,8A,8B	-1.0	+1.0	LSB
			04,05,06		-3.0	+3.0	
Output accuracy	AOUT	4/	01, 03, 04, 06	4,5,6	-7.0	+7.0	LSB
			02, 05		-4.0	+4.0	
			07		-13.0	+13.0	
			08		-19.0	+19.0	
Reference synthesizer	RS	Reference phase shift 3/ between the converter signal and reference inputs	All	4,5,6	-45	+45	deg
Reference input impedence	Z_{IN1}	3/ Single ended	All	4,5,6	100		kΩ
		Differential			250		
Reference input common mode range	CMR_1	3/	All	4,5,6	-210	+210	V pk
Signal input impedence	Z_{IN2}	3/ Line-to-line	All	4,5,6	17.5		kΩ
		Line-to-ground			11.5		
Signal input common mode range	CMR_2	3/	All	4,5,6	-25	+25	V

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified		Device types	Group A subgroups	Limits		Unit
						Min	Max	
Digital output low voltage	V_{OL}	Output bits 1-16, CB, and $\overline{BIT}$, I_{OL} = -1.6 mA		All	1,2,3		0.4	V
Digital output high voltage	V_{OH}	Output bits 1-16, CB, and $\overline{BIT}$, I_{OH} = 0.4 mA		01, 02, 03,07,08	1,2,3	2.8		V
		Output bits 1-16, CB, and $\overline{BIT}$, I_{OH} = 100 µA		04,05,06		2.8		
Output leakage current (high impedance)	I_Z	Output bits 1-16		All	1,2,3	-30	+30	µA
Digital output delay, converter busy	t_{CB}	Positive pulse, see figure 3		All	7,8A,8B	0.4	2.0	µs
Digital output error detection (built-in-test)	$\overline{BIT}$	Logic 0 indicates fault, minimum error for bit condition		All	7,8A,8B	20	100	LSB
Analog output error	e_{OUT}	All analog outputs loaded with a resistor of≤ 10 kΩ to ground 5/	10-bit mode	All	7,8A,8B	35.0	65.0	mVrms/ LSB
			12-bit mode			17.0	33.0	
			14-bit mode			8.7	16.3	
			16-bit mode			4.4	8.2	
Analog output offset voltage	V_{OS}	V_{OUT} at zero speed 6/		All	4,5,6		40	mV
Analog output positive linearity error	EUP	6/ 7/		01, 02, 03,07,08	4,5,6		2.0	%
				04, 05, 06	4		2.0	
					5,6		4.0	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Device types	Group A subgroups	Limits		Unit
					Min	Max	
Analog output negative linearity error	EUN	6/ 7/	01,02, 03,07,08	4,5,6		2.0	%
			04,05,06	4		2.0	
				5,6		4.0	
Analog output reversal error	EB	Difference between positive and negative linearity 7/	01, 02, 03,07,08	4,5,6		2.0	%
			04, 05, 06	4		2.0	
				5,6		4.0	
Velocity scale factor	SF	A = B = 2.0 V dc	All	4,5,6	52	70	µV/ LSB/ sec
Digital input high voltage	V_{IH}	$\overline{INH}$, $\overline{EL}$, $\overline{EM}$, $\overline{S}$, A, B, and digital bits 1-16 while in CT mode	01, 02, 03,07,08	7,8A,8B	2.0		V
			04,05,06		2.4		
Digital input low voltage	V_{IL}		All	7,8A,8B		0.8	V
Inhibit ($\overline{INH}$) voltage	$V_{\overline{INH}}$	No digital angles change while INH is logic 0 and analog input is rotating 2/	All	7,8A,8B		0.8	V
Enable voltage	V_E	$\overline{EM}$ controls output bits 1-8 and EL controls output bits 9-16. 2/	All	7,8A,8B		0.8	V
Disable voltage (high impedance)	V_D		01,02, 03,07,08	7,8A,8B	2.0		V
			04,05,06		2.4		
Positive supply current	I_{CC}		All	1,2,3		25	mA

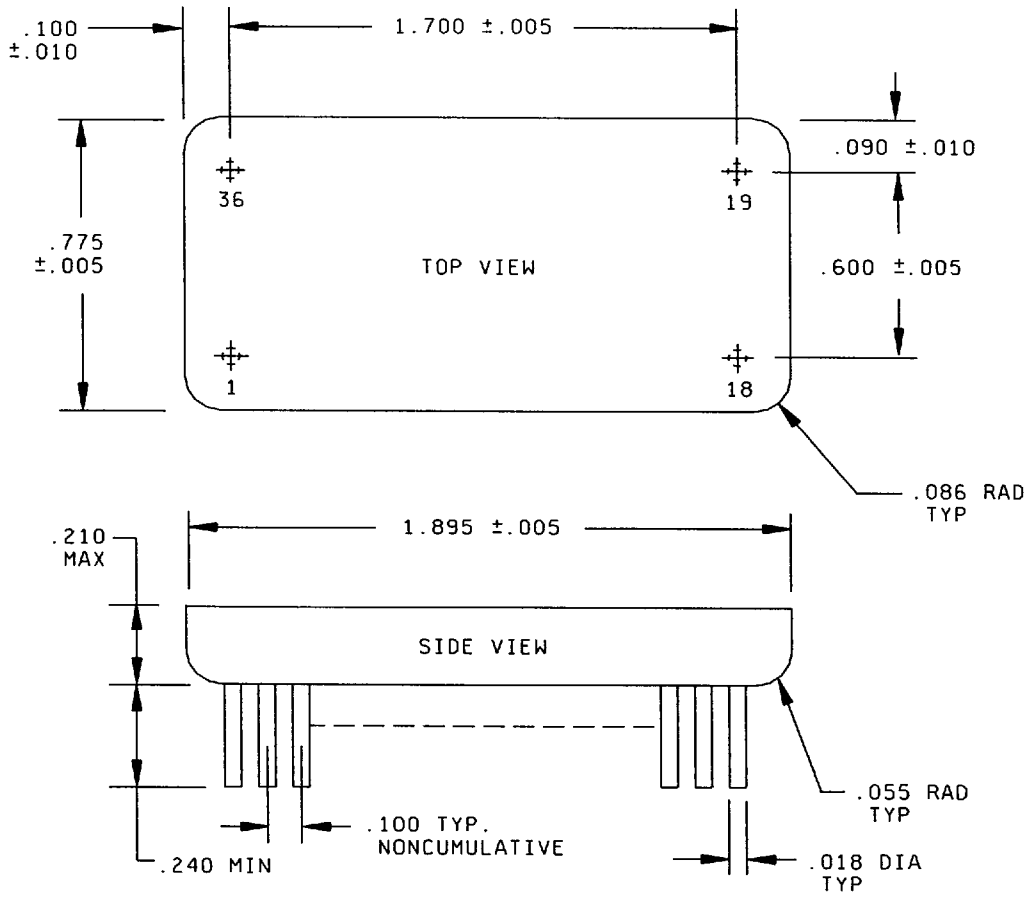
See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Device types	Group A subgroups	Limits		Unit
					Min	Max	
Negative supply current	I_{EE}	V_{EE} = -15.75 V dc	All	1,2,3		-15	mA
Logic supply current	I_{DD}	V_{DD} = +5.5 V dc	All	1,2,3		10	mA
Bandwidth	BW	16-bit and 14-bit mode 3/	01,02,07,08	7,8A,8B	38	70	Hz
		12-bit and 10-bit mode 3/	01,02,07,08		154	286	
		3/	04,05		38	70	
			03,06		56	104	

1/ V_{CC} = +15.0 V dc, V_{EE} = -15.0 V dc, and V_{DD} = +5.0 V dc, unless otherwise specified.
2/ These parameters are tested on a go-no-go basis only or in conjunction with other measured parameters that are not directly testable.
3/ Guaranteed by design but not tested.
4/ Output accuracy is measured at angles from 0° to 180°, in 15° increments, and at 225°, 270°, and 315°. Output accuracy measurements at 10, 12, and 14-bit resolutions are performed on a go-no-go basis only at 0° and 45°.
5/ Tested in 16-bit mode only. 10, 12, and 14 bit mode operations guaranteed by design and not tested.
6/ Tested as 12-bit with a full speed of 40 rps (revolutions per second). Velocity data is measured in multiples of full scale, 3/4, 1/2, 1/4, and ±0 of the rated full speed.
7/ 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.

Case outline X.



Inches	mm	Inches	mm
.005	0.13	.100	2.54
.010	0.25	.210	5.33
.015	0.38	.240	6.10
.018	0.46	.600	15.24
.055	1.40	.775	19.69
.086	2.18	1.700	43.18
.090	2.29	1.895	48.13

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Lead identification numbers are for reference only.
4. Pin 1 designator may be either the ESDS triangle or a solid dot.

FIGURE 1. Case outline.

Case outline Y.

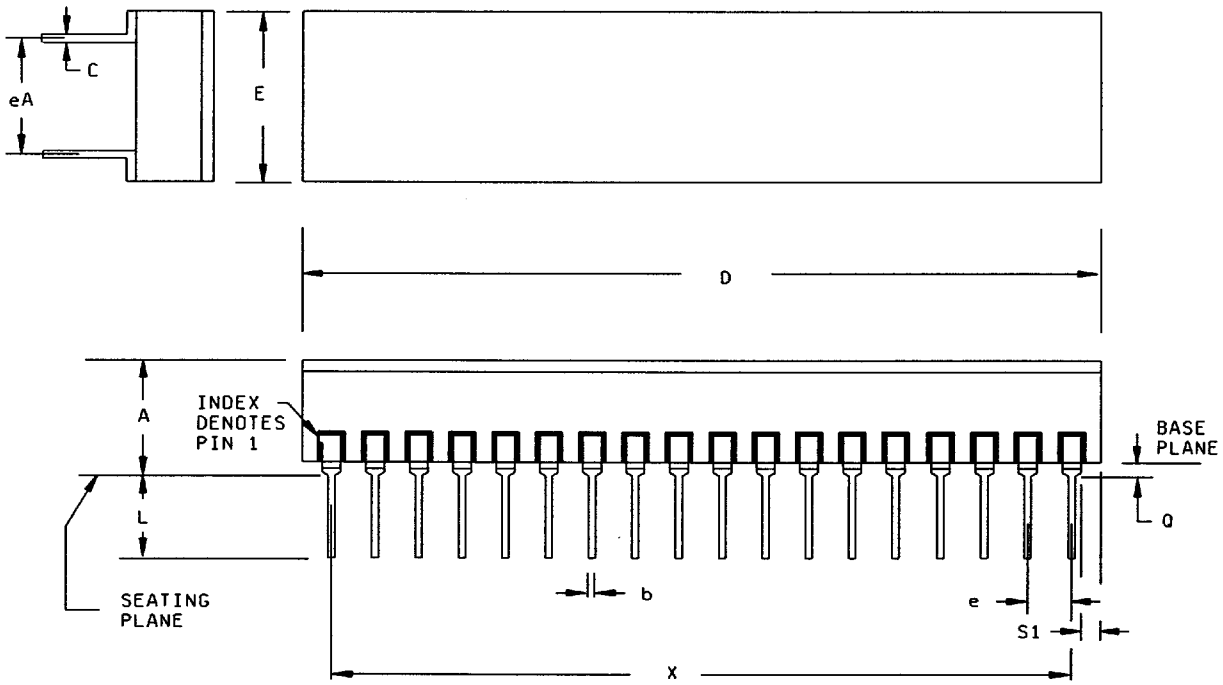


FIGURE 1. Case outline(s) - Continued.

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		20.32		0.800
e	2.54 BSC		0.100 BSC	
eA	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. 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.

FIGURE 1. Case outline(s) - Continued.

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

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

FIGURE 2. Terminal connections.

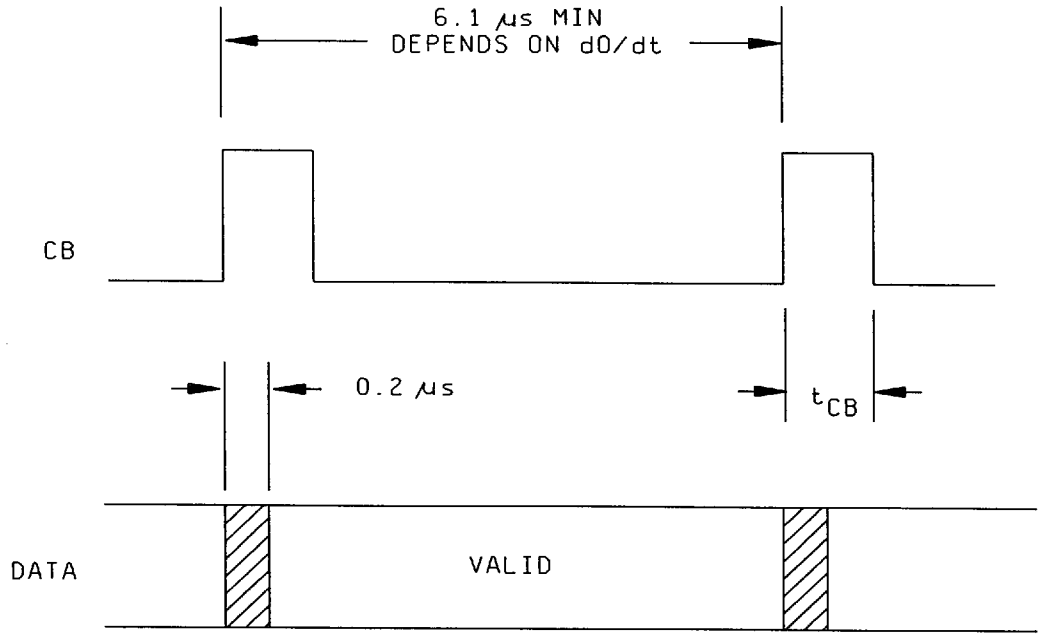


FIGURE 3. Converter busy timing diagram.

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 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
MIL-STD-883, group E end-point electrical parameters for RHA devices	Subgroups** (in accordance with method 5005, group A test table)

* PDA applies to subgroup 1.
** When applicable to this standard microcircuit drawing, the subgroups shall be defined.

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_c 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 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 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 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_c 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.

4.3.5 Group E inspection. Group E inspection is required only for parts intended to be marked as radiation hardness assured (see 3.5 herein). RHA levels shall be M, D, R, and H. RHA quality conformance inspection sample tests shall be performed at the RHA level specified in the acquisition document.

a. RHA tests for levels M, D, R, and H shall be performed through each level to determine at what levels the devices meet the RHA requirements. These RHA tests shall be performed for initial qualification and after design or process changes which may affect the RHA performance of the device.

b. End-point electrical parameters shall be as specified in table II herein.

c. Prior to total dose irradiation, each selected sample shall be assembled in its qualified package. It shall pass the specified group A electrical parameters in table I for subgroups specified in table II herein.

d. The devices shall be subjected to radiation hardness assured tests as specified in MIL-PRF-38534 for RHA level being tested, and meet the postirradiation end-point electrical parameter limits as defined in table I at T_A = +25°C ±5 percent, after exposure.

e. Prior to and during total dose irradiation testing, the devices shall be biased to establish a worst case condition as specified in the radiation exposure circuit.

f. For device classes H and K, subgroups 1 and 2 in table V, method 5005 of MIL-STD-883 shall be tested as appropriate for device construction.

g. When specified in the purchase order or contract, a copy of the RHA delta limits shall be supplied.

5. PACKAGING

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

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 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 Record of users. 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 microelectronic devices (FSC 5962) should contact DSCC-VA, telephone (614) 692-7603.

6.5 Comments. Comments on this drawing should be directed to DSCC-VA, P. O. Box 3990, Columbus, Ohio 43216-5000, or telephone (614) 692-0512.

6.6 Sources of supply. Sources of supply are listed in QML-38534. The vendors listed in QML-38534 have submitted a certificate of compliance (see 3.7 herein) to DSCC-VA and have agreed to this drawing.

STANDARD MICROCIRCUIT DRAWING SOURCE APPROVAL BULLETIN

DATE: 97-06-24

Approved sources of supply for SMD 5962-89499 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/
5962-8949901XA 5962-8949901XC	S7631 S7631	SDC14560-144 SDC14560-114
5962-8949901XA 5962-8949901XC 5962-8949901YX	19645 19645 3/	SDC14560-144 SDC14560-114 SDC14560-114
5962-8949902XA 5962-8949902XC	S7631 S7631	SDC14560-145 SDC14560-115
5962-8949902XA 5962-8949902XC 5962-8949902YX	19645 19645 3/	SDC14560-145 SDC14560-115 SDC14560-115
5962-8949903XC	S7631	SDC14560-605
5962-8949903XC 5962-8949903YX	19645 3/	SDC14560-605 SDC14560-605
5962-8949904XC	3/	HSD1066-341H/2
5962-8949905XC	3/	HSD1066-341V/2
5962-8949906XC	3/	HSD1066-C778H/2

1/ The lead finish shown for each PIN representing a hermetic package is available from the manufacturer listed for that part.
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 source.

Standard microcircuit drawing PIN 1/	Vendor CAGE number	Vendor similar PIN 2/
5962-8949907XA 5962-8949907XC	S7631 S7631	SDC14560-142 SDC14560-112
5962-8949907XA 5962-8949907XC 5962-8949907YX	19645 19645 3/	SDC14560-142 SDC14560-112 SDC14560-112
5962-8949908XA 5962-8949908XC	S7631 S7631	SDC14560-141 SDC14560-111
5962-8949908XA 5962-8949908XC 5962-8949908YX	19645 19645 3/	SDC14560-141 SDC14560-111 SDC14560-111

1/ The lead finish shown for each PIN representing a hermetic package is available from the manufacturer listed for that part.
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 source.

Vendor CAGE number	Vendor name and address
S7631	DDC Ireland LTD. Cork Business ans Technology Park Model Farm Road Cork, Ireland
19645	ILC Data Device Corporation 105 Wilbur Place Bohemia, NY 11716-2482

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