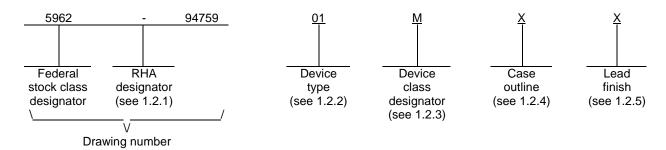
								F	REVISI	ONS										
LTR						DESCR	RIPTION	٧					DA	TE (YF	R-MO-[DA)	APPROVED			
Α	Char	Changes in accordance with N.O.R. 5962-R004-96.								95-10-13			M. A. FRYE							
В	Draw	ving upo	dated to	o reflec	reflect current requirements ro							02-0)3-04		R. MONNIN					
REV SHEET REV	В	В																		
SHEET	B 15	B 16																		
SHEET	15	-		REV	/		В	В	В	В	В	В	В	В	В	В	В	В	В	В
SHEET REV SHEET	15	-		RE\ SHE			B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B 10	B 11	B 12	B 13	
SHEET REV SHEET REV STATUS OF SHEETS PMIC N/A	15	16		SHE PRE RIC	EET PAREI CK OFF	FICER					5	6 EFEN	7 SE SI	8 JPPL	9 Y CE	10	11 COL	12 .UMB	13	
SHEET REV SHEET REV STATUS OF SHEETS PMIC N/A STA	15	16		SHE PRE RIC	EET PAREI CK OFF CKED JESH F	BY PITHAD	1				5	6 EFEN	7 SE SI COL	8 JPPL UMBI	9 .Y CE US, O	10	11 COL 43216	12 .UMB	13	
SHEET REV SHEET REV STATUS OF SHEETS PMIC N/A STAMICR DR THIS DRAW FOR	ANDAF OCIRC	RD CUIT IG	BLE	PRE RIC	EET PAREI CK OFF CKED JESH F	BY PITHAD	1			4 MIC	5	6 EFEN CIRCU	SE SI COLI http	JPPL UMBI D://ww	y CE US, O vw.ds	NTER HIO A cc.dla	11 2 COL 43216 a.mil	12	13 US	
SHEET REV SHEET REV STATUS OF SHEETS PMIC N/A STAMICR DR THIS DRAW FOR	ANDAF OCIRO AWIN USE BY ARTMEN ENCIES O	RD CUIT G AVAILAN ALL JTS OF THE	<u> </u>	SHE PRE RIC CHE RA.	EET PAREICK OFF CKED JESH F	BY PITHAD D BY FRYE	1 DIA	2		MIC ANA	DI DI	6 EFEN CIRCU	FE SI COLUMN TENTE TO THE PER SE SI	JPPL UMBI o://ww LINE/	9 Y CE US, O vw.ds	NTER HIO A cc.dla	11 2 COL 43216 a.mil	12	13 US	B 14

1. SCOPE

- 1.1 <u>Scope</u>. This drawing documents two product assurance class levels consisting of high reliability (device classes Q and M) and space application (device class V). 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 (RHA) levels are reflected in the PIN.
 - 1.2 PIN. The PIN is as shown in the following example:



- 1.2.1 RHA designator. Device classes Q and V RHA marked devices meet the MIL-PRF-38535 specified RHA levels and are marked with the appropriate RHA designator. Device class M RHA marked devices meet the MIL-PRF-38535, appendix A specified RHA levels and are marked with the appropriate RHA designator. A dash (-) indicates a non-RHA device.
 - 1.2.2 <u>Device type(s)</u>. The device type(s) identify the circuit function as follows:

Device type	Generic number	<u>Circuit function</u>
01	AD9040A	10-bit, 40 MSPS analog-to-digital converter

1.2.3 <u>Device class designator</u>. The device class designator is a single letter identifying the product assurance level as follows:

Device class Device requirements documentation

M Vendor self-certification to the requirements for MIL-STD-883 compliant, non-

JAN class level B microcircuits in accordance with MIL-PRF-38535, appendix A

Q or V Certification and qualification to MIL-PRF-38535

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

Outline letter	Descriptive designator	<u>Terminals</u>	Package style
X	GDIP4-T28	28	Dual-in-line
Υ	See figure 1	28	Flat pack with gull wing leads

1.2.5 <u>Lead finish</u>. The lead finish is as specified in MIL-PRF-38535 for device classes Q and V or MIL-PRF-38535, appendix A for device class M.

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1.3 Absolute maximum ratings. 1/

Positive voltage supply (+V _S)	+7 V
Negative voltage supply (-Vs)	-7 V
Analog inputs	-Vs to +Vs
Digital inputs	0 V to +V _S
Reference voltage input	_
Storage temperature range	
Junction temperature (T _J) Lead soldering temperature (10 seconds)	
Thermal resistance, junction-to-case (θ_{JC}):	
Case X	
Thermal resistance, junction-to-ambient (θ_{JA}):	
Case X	
Case Y	43°C/W

1.4 Recommended operating conditions.

Positive voltage supply (+V _S)	+5 V
Negative voltage supply (-V _S)	-5 V
Ambient operating temperature range (T _A)	-55°C to +125°C

2. APPLICABLE DOCUMENTS

2.1 <u>Government specification, standards, and handbooks</u>. 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 listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation.

SPECIFICATION

DEPARTMENT OF DEFENSE

MIL-PRF-38535 - Integrated Circuits, Manufacturing, General Specification for.

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-883 - Test Method Standard Microcircuits.

MIL-STD-1835 - Interface Standard Electronic Component Case Outlines.

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.

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HANDBOOKS

DEPARTMENT OF DEFENSE

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

MIL-HDBK-780 - Standard Microcircuit Drawings.

(Unless otherwise indicated, copies of the specification, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2 <u>Order of precedence</u>. 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 <u>Item requirements</u>. The individual item requirements for device classes Q and V shall be in accordance with MIL-PRF-38535 and as specified herein 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. The individual item requirements for device class M shall be in accordance with MIL-PRF-38535, appendix A for non-JAN class level B devices 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-38535 and herein for device classes Q and V or MIL-PRF-38535, appendix A and herein for device class M.
 - 3.2.1 Case outlines. The case outlines 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.
 - 3.2.3 Block diagram. The block diagram shall be as specified on figure 3.
- 3.3 <u>Electrical performance characteristics and post irradiation parameter limits</u>. Unless otherwise specified herein, the electrical performance characteristics and post irradiation parameter limits are as specified in table I and shall apply over the full ambient 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 defined in table I.
- 3.5 <u>Marking</u>. 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 MIL-HDBK-103. For packages where marking of the entire SMD PIN number is not feasible due to space limitations, the manufacturer has the option of not marking the "5962-" on the device. For RHA product using this option, the RHA designator shall still be marked. Marking for device classes Q and V shall be in accordance with MIL-PRF-38535. Marking for device class M shall be in accordance with MIL-PRF-38535, appendix A.
- 3.5.1 <u>Certification/compliance mark</u>. The certification mark for device classes Q and V shall be a "QML" or "Q" as required in MIL-PRF-38535. The compliance mark for device class M shall be a "C" as required in MIL-PRF-38535, appendix A.
- 3.6 <u>Certificate of compliance</u>. For device classes Q and V, a certificate of compliance shall be required from a QML-38535 listed manufacturer in order to supply to the requirements of this drawing (see 6.6.1 herein). For device class M, a certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in MIL-HDBK-103 (see 6.6.2 herein). The certificate of compliance submitted to DSCC-VA prior to listing as an approved source of supply for this drawing shall affirm that the manufacturer's product meets, for device classes Q and V, the requirements of MIL-PRF-38535 and herein or for device class M, the requirements of MIL-PRF-38535, appendix A and herein.
- 3.7 <u>Certificate of conformance</u>. A certificate of conformance as required for device classes Q and V in MIL-PRF-38535 or for device class M in MIL-PRF-38535, appendix A shall be provided with each lot of microcircuits delivered to this drawing.

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Test	Symbol	Conditions $\underline{1}/$ -55°C \leq T _A \leq +125°C unless otherwise specified	Group A subgroups	Device type	Lim	its <u>2</u> /	Unit
		·		,,	Min	Max	
DC accuracy section							
Differential nonlinearity	DNL		4	01	-1	+2	LSB
			5,6		-1	+2.5	
Integral nonlinearity	INL		4	01	-2	+2	LSB
			5,6		-2.5	+2.5	
Gain error	GE	3/	4	01	-1.5	+1.5	% of FS
			5,6		-3	+3	
No missing codes	NMC	4/	4,5,6	01		0	
Input capacitance	C _{IN}	See 4.4.1c	5,6	01		15	pF
Analog input section Input offset voltage	V _{IO}		1	01	-25	+25	mV
			2,3	-	-30	+30	
Input bias current	I _{IB}		1	01		15	μΑ
			2,3			25	
Input resistance	R _{IN}	T _A = +25°C	4	01	200	1000	kΩ
Bandgap reference section							
Output voltage	Vout		1,2,3	01	2.4	2.6	V
See footnotes at end of tabl	de.						
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Test	Symbol	Conditions $\underline{1}/$ -55°C \leq T _A \leq +125°C unless otherwise specified	Group A subgroups	Device type	Limits 2/		Unit
					Min	Max	1
Switching performance section	nc						
Maximum conversion rate	MCR		9,10,11	01	40		Msps
Minimum conversion rate	MCR		9	01	10		Msps
			10,11 <u>4</u> /	1	10		
Output propagation <u>5</u> / delay	t _{PD}	See figure 4	9	01	7.5	12	ns
			10,11 <u>4</u> /		6	14	
Dynamic performance section	n	,					-
Signal-to-noise ratio <u>6</u> /	SNR	f _{IN} = 2.3 MHz, T _A = +25°C	4	01	51		dB
		f _{IN} = 10.3 MHz, T _A = +25°C			50		
		ENCODE = 32 Msps, f _{IN} = 2.3 MHz, T _A = +25°C			52		
		ENCODE = 32 Msps,			51		-
Signal-to-noise ratio 6/	SNR	$f_{IN} = 10.3 \text{ MHz}, T_A = +25^{\circ}\text{C}$ $f_{IN} = 2.3 \text{ MHz}, T_A = +25^{\circ}\text{C}$	4	01	52		dB
(without harmonic)		f _{IN} = 10.3 MHz, T _A = +25°C			51		-
		ENCODE = 32 Msps,			53		-
		f _{IN} = 2.3 MHz, T _A = +25°C ENCODE = 32 Msps, f _{IV} = 10.3 MHz, T _A = 1.25°C			53		-
2 nd harmonic distortion	2 nd	$f_{IN} = 10.3 \text{ MHz}, T_A = +25^{\circ}\text{C}$ $f_{IN} = 2.3 \text{ MHz}, T_A = +25^{\circ}\text{C}$	4	01	56		dBc
		f _{IN} = 10.3 MHz, T _A = +25°C			56		1

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Test	Symbol	Conditions $-55^{\circ}C \le T_A \le -$ unless otherwise	_ +125°C	Group A subgroups	Device type	Limi	ts <u>2</u> /	Unit
						Min	Max	
Dynamic performance sectio	n - continue	d						
3 rd harmonic distortion	3 rd	f _{IN} = 2.3 MHz, T _A	= +25°C	4	01	58		dBc
		f _{IN} = 10.3 MHz, T	A = +25°C			58		
Aperature uncertainty (jitter)	AU	T _A = +25°C	<u>4</u> /	9	01		25	ps
Encode input section								
Logic "1" voltage	V _{IN1}			1,2,3	01	4.0		V
Logic "0" voltage	V _{IN0}			1,2,3	01		1.0	V
Logic "1" current	I _{IN1}			1,2,3	01	-1.0	+1.0	μА
Logic "0" current	I _{IN0}			1,2,3	01	-1.0	+1.0	μА
Encode pulse width (high)	tEH	See figure 4	<u>7</u> /	9	01	10	100	ns
				10,11 <u>4</u> /		10	100	
Encode pulse width (low)	t _{EL}	See figure 4	<u>7</u> /	9	01	10	100	ns
				10,11 <u>4</u> /		10	100	
Digital output section	1							1
Logic "1" voltage	V _{OUT1}			1,2,3	01	4.95		V
Logic "0" voltage	V _{OUT0}			1,2,3	01		0.05	V

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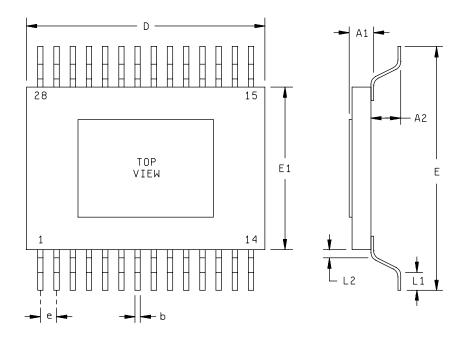
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TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions $\underline{1}/$ -55°C \leq T _A \leq +125°C unless otherwise specified	Group A subgroups	Device type	Lim	its <u>2</u> /	Unit
					Min	Max	
Power supply section							
V _{DD} supply current	I _{DD}		1,2,3	01		20	mA
+Vs supply current	+Is		1	01		110	mA
			2,3			115	
-V _S supply current	-I _S		1	01		105	mA
			2,3			110	
Power dissipation	PD		1	01		1.15	W
			2,3			1.2	
Power supply rejection ratio	PSRR	$T_A = +25^{\circ}C$ 8/	1	01	-15	+15	mV/V

- 1/ Unless otherwise specified, $+V_S = +5 \text{ V}$, $-V_S = -5 \text{ V}$, internal reference, ENCODE = 40.5 Msps, and 50 % duty cycle $\pm 10 \text{ %}$.
- 2/ The algebraic convention, whereby the most negative value is a minimum and the most positive is a maximum, is used in this table. Negative current shall be defined as conventional current flow out of a device terminal.
- 3/ Gain relative to 2.048 VPP.
- 4/ This test is guaranteed by design and characteristics testing over the full military temperature range.
- 5/ Output propagation delay (tpD) is measured from the 50 % point of the falling edge of the encode command to the minimum/maximum voltage levels of the digital outputs with 10 pF maximum loads.
- 6/ RMS signal to rms noise with analog input signal 1.0 dB below full scale at specified frequency.
- 7/ For rated performance at 40 Msps, duty cycle of encode command should be 50% ±10%.
- 8/ Measured as the ratio of the change in offset voltage for a 5% change in +Vs or -Vs.
- 3.8 <u>Notification of change for device class M.</u> For device class M, notification to DSCC-VA of change of product (see 6.2 herein) involving devices acquired to this drawing is required for any change as defined in MIL-PRF-38535, appendix A.
- 3.9 <u>Verification and review for device class M.</u> For device class M, DSCC, DSCC's agent, and the acquiring activity retain the option to review the manufacturer's facility and applicable required documentation. Offshore documentation shall be made available onshore at the option of the reviewer.
- 3.10 <u>Microcircuit group assignment for device class M.</u> Device class M devices covered by this drawing shall be in microcircuit group number 57 (see MIL-PRF-38535, appendix A).

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Symbol	Millimeters		Incl	hes
	Min	Max	Min	Max
A1		3.175		.125
A2	.635	.889	.025	.035
b	.38	.48	.015	.019
D	18.087	18.493	.712	.728
E	19.046	19.554	.750	.770
E1	2.497	2.903	.492	.508
е	1.27 BSC		.050	BSC
L1	1.016		.040	
L2	.762		.030	
N	28		2	8

NOTE:

1. The U.S. government preferred system of measurement is the metric SI system. However, since this item was original designed using inch-pound units of measurement, in the event of conflict between the metric and inch-pound units, the inch-pound shall take precedence.

FIGURE 1. Case outline Y.

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Device type	01
Case outlines	X and Y
Terminal	Terminal symbol
number	
1	-V _S
2	GND
3	+V _S
4	GND
5	V _{OUT}
6	V _{REF}
7	BP _{REF}
8	NC
9	ENCODE
10	+V _S
11	GND
12	-V _S
13	A _{IN}
14	GND
15	OR
16	D9 (MSB)
17	D8
18	D7
19	D6
20	D5
21	-V _S
22	GND
23	V _D
24	D4
25	D3
26	D2
27	D1
28	D0 (LSB)

FIGURE 2. <u>Terminal connections</u>.

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Terminal symbol	Description
-Vs	-5 V power supply.
GND	Ground.
+V _S	Analog +5 V power supply.
V _{OUT}	Internal bandgap voltage reference
	(nominally +2.5 V).
V _{REF}	Noninverting input to reference amplifier.
	Voltage reference for ADC is connected here.
BP _{REF}	External connection for (0.1 μF) reference bypass capacitor.
NC	No connection.
ENCODE	Encode clock inputs to ADC. Internal T/H placed in hold mode
	(ADC is encoding) on rising edge.
AIN	Noninverting input to T/H amplifier.
OR	Out-of-Range condition output. Active high when analog input
	exceeds input range of ADC by 1 LSB
	(< FS – 1 LSB or > + FS + 1 LSB).
D9 (MSB)	Most significant bit of ADC output; TTL/CMOS compatible.
D8 – D5	Digital output bits of ADC; TTL/CMOS compatible.
V _D	Digital +5 V power supply.
D4 – D1	Digital output bits of ADC; TTL/CMOSL compatible.
D0 (LSB)	Least significant bit of ADC output; TTL/CMOS compatible.

FIGURE 2. <u>Terminal connections</u> – continued.

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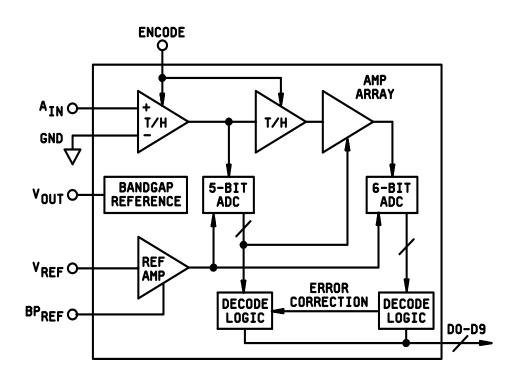
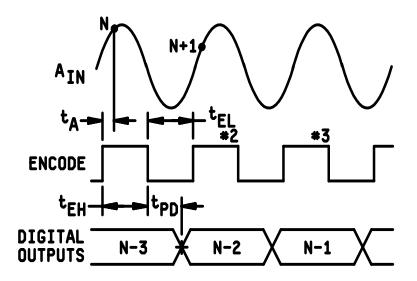


FIGURE 3. Block diagram.

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Description	Minimum	Typical	Maximum
t _A = aperture delay		1.9 ns	
t _{EH} = pulse width high	10 ns		100 ns
t _{EL} = pulse width low	10 ns		100 ns

FIGURE 4. Timing waveforms.

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4. QUALITY ASSURANCE PROVISIONS

- 4.1 <u>Sampling and inspection</u>. For device classes Q and V, sampling and inspection procedures shall be in accordance with MIL-PRF-38535 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. For device class M, sampling and inspection procedures shall be in accordance with MIL-PRF-38535, appendix A.
- 4.2 <u>Screening</u>. For device classes Q and V, screening shall be in accordance with MIL-PRF-38535, and shall be conducted on all devices prior to qualification and technology conformance inspection. For device class M, screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to quality conformance inspection.

4.2.1 Additional criteria for device class M.

- 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 the preparing or acquiring activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1015.
 - (2) $T_A = +125^{\circ}C$, minimum.
- b. Interim and final electrical test parameters shall be as specified in table II herein.

4.2.2 Additional criteria for device classes Q and V.

- a. The burn-in test duration, test condition and test temperature, or approved alternatives shall be as specified in the device manufacturer's QM plan in accordance with MIL-PRF-38535. The burn-in test circuit shall be maintained under document revision level control of the device manufacturer's Technology Review Board (TRB) in accordance with MIL-PRF-38535 and shall be made available to the acquiring or preparing activity upon request. 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.
- b. Interim and final electrical test parameters shall be as specified in table II herein.
- c. Additional screening for device class V beyond the requirements of device class Q shall be as specified in MIL-PRF-38535, appendix B.
- 4.3 <u>Qualification inspection for device classes Q and V</u>. Qualification inspection for device classes Q and V shall be in accordance with MIL-PRF-38535. Inspections to be performed shall be those specified in MIL-PRF-38535 and herein for groups A, B, C, D, and E inspections (see 4.4.1 through 4.4.4).
- 4.4 <u>Conformance inspection</u>. Technology conformance inspection for classes Q and V shall be in accordance with MIL-PRF-38535 including groups A, B, C, D, and E inspections and as specified herein. Quality conformance inspection for device class M shall be in accordance with MIL-PRF-38535, appendix A and as specified herein. Inspections to be performed for device class M shall be those specified in method 5005 of MIL-STD-883 and herein for groups A, B, C, D, and E inspections (see 4.4.1 through 4.4.4).

4.4.1 Group A inspection.

- a. Tests shall be as specified in table II herein.
- b. Subgroups 7 and 8 in table I, method 5005 of MIL-STD-883 shall be omitted.
- c. Subgroups 5 and 6 (C_{IN} measurement) shall be measured only for the initial test and after process or design changes which may effect input capacitance.

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TABLE II. Electrical test requirements.

Test requirements	Subgroups (in accordance with MIL-STD-883, method 5005, table I)	Subgi (in accord MIL-PRF-38	•
	Device class M	Device class Q	Device class V
Interim electrical parameters (see 4.2)	1	1	1
Final electrical parameters (see 4.2)	1,2,3,4,5,6,9 <u>1</u> /	1,2,3,4, <u>1</u> / 5,6,9	1,2,3,4, <u>1</u> / 5,6,9
Group A test requirements (see 4.4)	1,2,3,4,5,6,9,10,11	1,2,3,4,5,6, 9,10,11	1,2,3,4,5,6, 9,10,11
Group C end-point electrical parameters (see 4.4)	1	1	1
Group D end-point electrical parameters (see 4.4)	1	1	1
Group E end-point electrical parameters (see 4.4)	1	1	1

^{1/} PDA applies to subgroup 1.

- 4.4.2 Group C inspection. The group C inspection end-point electrical parameters shall be as specified in table II herein.
- 4.4.2.1 Additional criteria for device class M. Steady-state life test conditions, method 1005 of MIL-STD-883:
 - a. 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 the preparing or acquiring activity upon request. 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.
 - b. $T_A = +125$ °C, minimum.
 - c. Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.
- 4.4.2.2 Additional criteria for device classes Q and V. The steady-state life test duration, test condition and test temperature, or approved alternatives shall be as specified in the device manufacturer's QM plan in accordance with MIL-PRF-38535. The test circuit shall be maintained under document revision level control by the device manufacturer's TRB in accordance with MIL-PRF-38535 and shall be made available to the acquiring or preparing activity upon request. 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.
 - 4.4.3 Group D inspection. The group D inspection end-point electrical parameters shall be as specified in table II herein.

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- 4.4.4 <u>Group E inspection</u>. Group E inspection is required only for parts intended to be marked as radiation hardness assured (see 3.5 herein).
 - End-point electrical parameters shall be as specified in table II herein.
 - b. For device classes Q and V, the devices or test vehicle shall be subjected to radiation hardness assured tests as specified in MIL-PRF-38535 for the RHA level being tested. For device class M, the devices shall be subjected to radiation hardness assured tests as specified in MIL-PRF-38535, appendix A for the RHA level being tested. All device classes must meet the post irradiation end-point electrical parameter limits as defined in table I at T_A = +25°C ±5°C, after exposure, to the subgroups specified in table II herein.
 - c. When specified in the purchase order or contract, a copy of the RHA delta limits shall be supplied.

5. PACKAGING

5.1 <u>Packaging requirements</u>. The requirements for packaging shall be in accordance with MIL-PRF-38535 for device classes Q and V or MIL-PRF-38535, appendix A for device class M.

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.
- 6.1.1 <u>Replaceability</u>. Microcircuits covered by this drawing will replace the same generic device covered by a contractor prepared specification or drawing.
 - 6.1.2 Substitutability. Device class Q devices will replace device class M devices.
- 6.2 <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 using DD Form 1692, Engineering Change Proposal.
- 6.3 <u>Record of users</u>. Military and industrial users should inform Defense Supply Center Columbus when a system application requires configuration control and which SMD's are applicable to that system. 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) 692-0544.
- 6.4 <u>Comments</u>. Comments on this drawing should be directed to DSCC-VA , Columbus, Ohio 43216-5000, or telephone (614) 692-0547.
- 6.5 <u>Abbreviations, symbols, and definitions</u>. The abbreviations, symbols, and definitions used herein are defined in MIL-PRF-38535 and MIL-HDBK-1331.
 - 6.6 Sources of supply.
- 6.6.1 <u>Sources of supply for device classes Q and V</u>. Sources of supply for device classes Q and V are listed in QML-38535. The vendors listed in QML-38535 have submitted a certificate of compliance (see 3.6 herein) to DSCC-VA and have agreed to this drawing.
- 6.6.2 <u>Approved sources of supply for device class M.</u> Approved sources of supply for class M are listed in MIL-HDBK-103. The vendors listed in MIL-HDBK-103 have agreed to this drawing and a certificate of compliance (see 3.6 herein) has been submitted to and accepted by DSCC-VA.

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STANDARD MICROCIRCUIT DRAWING BULLETIN

DATE: 02-03-04

Approved sources of supply for SMD 5962-94759 are listed below for immediate acquisition information only and shall be added to MIL-HDBK-103 and QML-38535 during the next revision. MIL-HDBK-103 and QML-38535 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 MIL-HDBK-103 and QML-38535.

Standard	Vendor	Vendor
microcircuit drawing	CAGE	similar
PIN <u>1</u> /	number	PIN <u>2</u> /
5962-9475901MXA	24355	AD9040ATQ/883B
5962-9475901MYC	<u>3</u> /	AD9040ATZ/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 its availability.
- <u>2</u>/ <u>Caution</u>. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.
- 3/ This device is not available from an approved source of supply.

 Vendor CAGE
 Vendor name

 number
 and address

24355 Analog Devices

Route 1 Industrial Park

P.O. Box 9106 Norwood, MA 02062

Point of contact: 7910 Traid Center

Greensboro, NC 27409-9605

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