

REVISIONS

LTR	DESCRIPTION	DATE (YR-MO-DA)	APPROVED
	查询"5962-9564101MPA"供应商		

REV																				
SHEET																				
REV																				
SHEET																				

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

STANDARD MICROCIRCUIT DRAWING THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE AMSC N/A	PMIC N/A	PREPARED BY RICK OFFICER	DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	
		CHECKED BY RAJESH PITHADIA		
		APPROVED BY MICHAEL FRYE	MICROCIRCUIT, LINEAR, 23 MHZ, DUAL PRECISION OPERATIONAL AMPLIFIER, MONOLITHIC SILICON	
		DRAWING APPROVAL DATE 95-06-20		
		REVISION LEVEL		
	SIZE A	CAGE CODE 67268	5962-95641	
	SHEET 1 OF 12			

DESC FORM 193
JUL 94

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

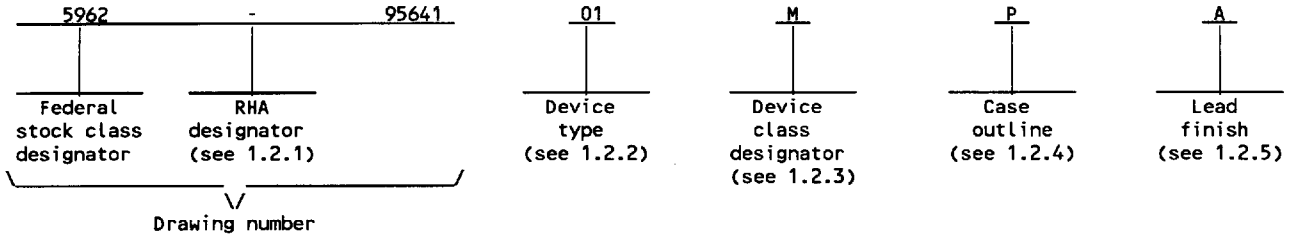
5962-E398-96

■ 9004708 0023398 225 ■

1. SCOPE

1.1 Scope. This drawing documents two product assurance class levels consisting of high reliability (device classes Q and V) and space application (device class S). 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 Device type(s). The device type(s) identify the circuit function as follows:

<u>Device type</u>	<u>Generic number</u>	<u>Circuit function</u>
01	LT1215	25 MHz, dual precision operational amplifier
02	LT1215A	25 MHz, dual precision operational amplifier

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

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

<u>Outline letter</u>	<u>Descriptive designator</u>	<u>Terminals</u>	<u>Package style</u>
P	GDIP1-T8 or CDIP2-T8	8	Dual-in-line

1.2.5 Lead finish. 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.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 2

1.3 Absolute maximum ratings. 1/

查询"5962-9564101 MPA"供应商

Supply voltage (V_S)	36 V
Input current (I_{IN})	± 15 mA
Output short-circuit duration	Continuous 2/
Power dissipation (P_D)	1.25 W
Lead temperature (soldering, 10 seconds)	+300°C
Junction temperature (T_J)	+150°C
Storage temperature range	-65°C to +150°C
Thermal resistance, junction-to-case (θ_{JC})	See MIL-STD-1835
Thermal resistance, junction-to-ambient (θ_{JA})	100°C/W

1.4 Recommended operating conditions.

Supply voltage ($+V_S$ to $-V_S$)	3.3 V, 5 V, ± 15 V
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 listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation.

SPECIFICATION

MILITARY

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

STANDARDS

MILITARY

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

HANDBOOKS

MILITARY

MIL-HDBK-103 - List of Standard Microcircuit Drawings (SMD's).
 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 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.
- 2/ A heat sink may be required to keep the junction temperature below absolute maximum when the output is shorted indefinitely.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 3

3. REQUIREMENTS

3.1 Item requirements. 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 Design, construction, and physical dimensions. 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 outline(s). The case outline(s) shall be in accordance with 1.2.4 herein.

3.2.2 Terminal connections. The terminal connections shall be as specified on figure 1.

3.3 Electrical performance characteristics and postirradiation parameter limits. Unless otherwise specified herein, the electrical performance characteristics and postirradiation parameter limits are as specified in table I and shall apply over the full ambient 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. 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 Certification/compliance mark. 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 Certificate of compliance. 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 DESC-EC 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 Certificate of conformance. 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.

3.8 Notification of change for device class M. For device class M, notification to DESC-EC of change of product (see 6.2 herein) involving devices acquired to this drawing is required for any change as defined in MIL-STD-973.

3.9 Verification and review for device class M. For device class M, DESC, DESC'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 Microcircuit group assignment for device class M. Device class M devices covered by this drawing shall be in microcircuit group number 49 (see MIL-PRF-38535, appendix A).

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. 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.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 4

DESC FORM 193A
JUL 94

9004708 0023401 64T

TABLE I. Electrical performance characteristics.

查询"5962-9564101MPA"供应商

Test	Symbol	Conditions -55°C ≤ T _A ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
V _S = 3.3 V 1/							
Input offset voltage	V _{OS}		1	01		450	μV
				02		300	
			2,3	01		750	
				02		450	
Input voltage range	V _{IN}	2/	1	01,02	1.3 to 0		V
			2,3		1.1 to 0.4		
Maximum output voltage swing	V _{OUT}	Output high, no load	1	01,02	2.6		V
			2,3		2.3		
		Output high, I _{SOURCE} = 1 mA	1		2.5		
			2,3		2.2		
		Output high, I _{SOURCE} = 30 mA	1		1.9		
			2,3		1.8		
		Output high, I _{SOURCE} = 20 mA	1			0.08	
			2,3			0.012	
		Output low, no load	1			0.05	
			2,3			0.07	
Output low, I _{SINK} = 1 mA	1		1.0				
	2,3		1.0				
Output low, I _{SINK} = 30 mA	1						
	2,3						
Output low, I _{SINK} = 20 mA	1						
	2,3						
Maximum output current	I _{OUT}	T _A = +25°C	1	01,02	±30		mA
V _S = 5 V 1/							
Input offset voltage	V _{OS}		1	01		450	μV
				02		300	
			2,3	01		750	
				02		450	
See footnotes at end of table.							
STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444				SIZE A			5962-95641
					REVISION LEVEL	SHEET 5	

DESC FORM 193A
JUL 94

9004708 0023402 586

TABLE I. Electrical performance characteristics - Continued.

查询"5962-9564101MPA"供应商

Test	Symbol	Conditions -55°C ≤ T _A ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
V _S = 5 V 1/							
Input offset voltage drift	ΔV _{OS} / Δt	T _A = +125°C, -55°C 3/	2,3	01		5	μV/°C
				02		2.5	
Input offset current	I _{OS}		1	01		120	nA
				02		80	
			2,3	01		200	
				02		150	
Input bias current	I _{IB}		1	01		600	nA
				02		500	
			2,3	01		700	
				02		600	
Input resistance	R _{IN}	Differential mode, 3/ T _A = +25°C	1	01,02	10		MΩ
Input voltage range	V _{INR}		1	01,02	3 to 0		V
			2,3		2.8 to 0.4		
Maximum output voltage 4/ swing	V _{OUT}	Output high, no load	1	01,02	4.3		V
			2,3		4.0		
		Output high, I _{SOURCE} = 1 mA	1		4.2		
			2,3		3.9		
		Output high, I _{SOURCE} = 30 mA	1		3.6		
			2,3		3.5		
		Output low, no load	1			0.008	
			2,3			0.012	
		Output low, I _{SINK} = 1 mA	1			0.05	
			2,3			0.07	
		Output low, I _{SINK} = 30 mA	1			1.0	
			2,3			1.0	

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 6

DESC FORM 193A
JUL 94

9004708 0023403 412

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _A ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
$V_S = 5\text{ V } 1/$							
Maximum output current	I _{OUT}	T _A = +25°C 2/	1	01,02	±30		mA
Supply current per amplifier	I _S		1	01,02	3.6	6.6	mA
			2,3		2.3	8.4	
Minimum supply voltage	V _S	Single supply, T _A = +25°C	1	01,02		2.5	V
Common mode rejection mode	CMRR	V _{CM} = 0 V to 3 V	4	01	86		dB
				02	90		
		V _{CM} = 0.4 V to 2.8 V	5,6	01	82		
				02	87		
Power supply rejection ratio	PSRR	V _S = 2.5 V to 12.5 V	4	01	93		dB
				02	96		
		V _S = 2.7 V to 12.5 V	5,6	01	90		
				02	93		
Large signal voltage gain	A _{VOL}	V _{OUT} = 0.05 V to 3.7 V, R _L = 500 Ω	4	01,02	150		V/mV
$V_S = \pm 15\text{ V } 6/$							
Input offset voltage	V _{OS}		1	01		650	μV
				02		500	
			2,3	01		950	
				02		650	
Input offset voltage drift	ΔV _{OS} /Δt	T _A = +125°C, -55°C 3/	2,3	01		5	μV/°C
				02		2.5	
Input offset current	I _{OS}		1	01		110	nA
				02		80	
			2,3	01		200	
				02		150	
See footnotes at end of table.							
STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444			SIZE A		5962-95641		SHEET 7
			REVISION LEVEL				

DESC FORM 193A
JUL 94

9004708 0023404 359

TABLE I. Electrical performance characteristics - Continued.

查询"5962-9564101MPA"供应商

Test	Symbol	Conditions -55°C ≤ T _A ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
V _S = ±15 V $\bar{\Delta}$ /							
Input bias current	I _B		1	01		550	nA
				02		500	
			2,3	01		700	
				02		600	
Input voltage range	V _{INR}		1	01,02	13 to -15		V
			2,3		12.8 to -14.6		
Supply current per amplifier	I _S		1	01,02	3.6	8	mA
			2,3		2.3	10.3	
Minimum supply voltage	V _S	Equal split supplies, T _A = +25°C	1	01,02		2.5	V
Minimum output current	I _{OUT}	T _A = +25°C $\bar{\Delta}$ /	1	01,02	±30		mA
Maximum output voltage swing	V _{OUT}	Output high, I _{SOURCE} = 30 mA	1	01,02	13.5		V
		Output high, I _{SOURCE} = 20 mA	2,3		13.4		
		Output low, I _{SINK} = 30 mA	1		-14		
		Output low, I _{SINK} = 20 mA	2,3		-14		
Common mode rejection ratio	CMRR	V _{CM} = -15 V to 13 V	4	01	86		dB
				02	90		
		V _{CM} = -14.6 V to 12.8 V	5,6	01	82		
				02	87		
Power supply rejection ratio	PSRR	V _S = ±2 V to ±18 V	4	01	93		dB
				02	96		
		V _S = ±2.2 V to ±15 V	5,6	01	90		
				02	93		
Slew rate	SR	A _V = -2, T _A = +25°C $\bar{\Delta}$ /	4	01,02	40		V/μs
Gain bandwidth product	GBW	f = 100 kHz, T _A = +25°C	4	01,02	15		MHz

See footnotes at end of table.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 8

DESC FORM 193A
JUL 94

9004708 0023405 295

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _A ≤ +125°C unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
V _S = ±15 V ⑥/							
Channel separation	CS	V _{OUT} = ±10 V, R _L = 2 kΩ T _A = +25°C	4	01,02	128		dB
Large signal voltage gain	A _{VOL}	V _{OUT} = 0 V to ±10 V, R _L = 2 kΩ	4	01,02	1000		V/mV
			5,6		500		

- 1/ Unless otherwise specified, V_{CM} = 0.5 V and V_{OUT} = 0.5 V.
- 2/ Guaranteed to correlation to 5 V and ±15 V tests.
- 3/ If not tested, shall be guaranteed to the limits specified in table I herein.
- 4/ Guaranteed to correlation to 3.3 V and ±15 V tests.
- 5/ Guaranteed to correlation to 3.3 V tests.
- 6/ Unless otherwise specified, V_{CM} = 0 V and V_{OUT} = 0 V.
- 7/ Slew rate is measured between ±8.5 V on an output swing of ±10 V on ±15 V supplies.

4.2 Screening. 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 C. 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°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.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 9

Device types	01 and 02
Case outline	P
Terminal number	Terminal symbol
1	OUTPUT A
2	-INPUT A
3	+INPUT A
4	-V _S
5	+INPUT B
6	-INPUT B
7	OUTPUT B
8	+V _S

FIGURE 1. Terminal connections.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 10

4.3 Qualification inspection for device classes Q and V. 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 Conformance inspection. 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 except where option 2 of MIL-PRF-38535 permits alternate in-line control testing. 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, 8, 9, 10, and 11 in table I, method 5005 of MIL-STD-883 shall be omitted.

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 C. 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. $T_A = +125^\circ\text{C}$, 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.

4.4.4 Group E inspection. Group E inspection is required only for parts intended to be marked as radiation hardness assured (see 3.5 herein).

- a. 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 postirradiation end-point electrical parameter limits as defined in table I at $T_A = +25^\circ\text{C} \pm 5^\circ\text{C}$, 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 Packaging requirements. 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.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 11

DESC FORM 193A
JUL 94

9004708 0023408 TT4

TABLE II. Electrical test requirements.

Test requirements	Subgroups (in accordance with MIL-STD-883, method 5005, table I)	Subgroups (in accordance with MIL-PRF-38535, table III)	
	Device class M	Device class Q	Device class V
Interim electrical parameters (see 4.2)	---	---	---
Final electrical parameters (see 4.2)	1,2,3, 1/ 4,5,6	1,2,3, 1/ 4,5,6	1,2,3, 1/ 4,5,6
Group A test requirements (see 4.4)	1,2,3, 4,5,6	1,2,3, 4,5,6	1,2,3, 4,5,6
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.

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.

6.1.1 Replaceability. 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 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.

6.3 Record of users. Military and industrial users should inform Defense Electronics Supply Center when a system application requires configuration control and which SMD's are applicable to that system. DESC 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 DESC-EC, telephone (513) 296-6047.

6.4 Comments. Comments on this drawing should be directed to DESC-EC, Dayton, Ohio 45444-5270, or telephone (513) 296-5377.

6.5 Abbreviations, symbols, and definitions. 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 Sources of supply for device classes Q and V. 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 DESC-EC and have agreed to this drawing.

6.6.2 Approved sources of supply for device class M. 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 DESC-EC.

STANDARD MICROCIRCUIT DRAWING DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE A		5962-95641
		REVISION LEVEL	SHEET 12