

INCH-POUND

MIL-M-38510/338B
10 February 2004
SUPERSEDING
MIL-M-38510/338A
22 May 1990

MILITARY SPECIFICATION

MICROCIRCUITS, DIGITAL, BIPOLAR, ADVANCED SCHOTTKY TTL,
ARITHMETIC LOGIC UNITS, MONOLITHIC SILICON

Reactivated after 10 February 2004 and may be used for either new or existing design acquisition.

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product herein shall consist of this specification sheet and MIL-PRF 38535

1. SCOPE

1.1 Scope. This specification covers the detail requirements for monolithic silicon, advanced Schottky TTL, arithmetic logic units. Two product assurance classes and a choice of case outlines and lead finishes are provided for each type and are reflected in the complete part number. For this product, the requirements of MIL-M-38510 have been superseded by MIL-PRF-38535, (see 6.3).

1.2 Part or Identifying Number (PIN). The PIN is in accordance with MIL-PRF-38535, and as specified herein.

1.2.1 Device types. The device types are as follows:

<u>Device type</u>	<u>Circuit</u>
01	4-bit arithmetic logic unit
02	Carry look-a-head generator
03	4-bit arithmetic logic unit
04	4-bit arithmetic logic unit

1.2.2 Device class. The device class is the product assurance level as defined in MIL-PRF-38535.

1.2.3 Case outlines. The case outlines 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>
E	GDIP1-T16 or CDIP2-T16	16	Dual-in-line
F	GDFP2-F16 or CDFP3-F16	16	Flat pack
J	GDIP1-T24 or CDIP2-T-24	24	Dual-in-line
K	GDFP2-F24 or CDFP3-F24	24	Flat pack
L	GDIP3-T24 or CDIP4-T24	24	Dual-in-line
R	GDIP1-T20 or CDIP2-T20	20	Dual-in-line
S	GDFP2-F20 or CDFP3-F20	20	Flat pack
3	CQCC1-N28	28	Square leadless chip carrier
2	CQCC1-N20	20	Square leadless chip carrier

Comments, suggestions, or questions on this document should be addressed to: Commander, Defense Supply Center Columbus, ATTN: DSCC-VAS, 3990 East Broad St., Columbus, OH 43216-5000, or emailed to bipolar@dsccl.dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at www.dodssp.daps.mil.

1.3 Absolute maximum ratings.

Supply voltage range	-0.5 V dc to +7.0 V dc
Input voltage range	-1.2 V dc at -18 mA to +7.0 V dc
Storage temperature range	-65° to +150°C
Maximum power dissipation, per device (P_D) <u>1/</u>	
Device type 01	358 mW
Device type 02	198 mW
Device type 03	490 mW
Device type 04	446 mW
Lead temperature (soldering, 10 seconds)	+300°C
Thermal resistance, junction to case (θ_{JC})	(See MIL-STD-1835)
Junction temperature (T_J) <u>2/</u>	175°C

1.4 Recommended operating conditions.

Supply voltage (V_{CC})	4.5 V minimum to 5.5 V maximum
Minimum high level input voltage (V_{IH})	2.0 V dc
Maximum low level input voltage (V_{IL})	0.8 V dc
Normalized fanout (each output) <u>3/</u> :	
Low level	33 maximum
High level	50 maximum
Case operating temperature range (T_C)	-55° to +125°C

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3, 4, or 5 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications and Standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATIONS

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

DEPARTMENT OF DEFENSE STANDARDS

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

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

1/ Must withstand the added P_D due to short-circuit test (e.g., I_{OS}).

2/ Maximum junction temperature shall not be exceeded except in accordance with allowable short duration burn-in screening condition in accordance with MIL-PRF-38535.

3/ The device shall fanout in both high and low levels to specified number of inputs of the same device type as that being tested.

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

3. REQUIREMENTS

3.1 Qualification. Microcircuits furnished under this specification shall be products that are manufactured by a manufacturer authorized by the qualifying activity for listing on the applicable qualified manufacturers list before contract award (see 4.3 and 6.4).

3.2 Item requirements. The individual item requirements 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.

3.3 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38535 and herein.

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

3.3.2 Truth tables. The truth tables shall be as specified on figure 2.

3.3.3 Logic diagrams. The logic diagrams shall be as specified on figure 3.

3.3.4 Schematic circuits. The schematic circuits shall be maintained by the manufacturer and made available to the qualifying activity and the preparing activity upon request.

3.3.3 Case outlines. The case outlines shall be as specified in 1.2.3.

3.4 Lead material and finish. The lead material and finish shall be in accordance with MIL-PRF-38535 (see 6.6).

3.5 Electrical performance characteristics. The electrical performance characteristics are as specified in table I, and apply over the full recommended case operating temperature range, unless otherwise specified.

3.6 Electrical test requirements. The electrical test requirements for each device class shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table III.

3.7 Marking. Marking shall be in accordance with MIL-PRF-38535.

3.8 Microcircuit group assignment. The devices covered by this specification shall be in microcircuit group number 11 (see MIL-PRF-38535, appendix A).

4. VERIFICATION

4.1 Sampling and inspection. 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 effect the form, fit, or function as described herein.

4.2 Screening. Screening shall be in accordance with MIL-PRF-38535 and shall be conducted on all devices prior to qualification and quality conformance inspection. The following additional criteria shall apply:

- 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 control by 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, except interim electrical parameters test prior to burn-in is optional at the discretion of the manufacturer.
- c. Additional screening for space level product shall be as specified in MIL-PRF-38535.

4.3 Qualification inspection. Qualification inspection shall be in accordance with MIL-PRF-38535.

4.4 Technology Conformance inspection (TCI). Technology conformance inspection shall be in accordance with MIL-PRF-38535 and herein for groups A, B, C, and D inspections (see 4.4.1 through 4.4.4).

4.4.1 Group A inspection. Group A inspection shall be in accordance with table III of MIL-PRF-38535 and as follows:

- a. Tests shall be as specified in table II herein.
- b. Subgroups 4, 5, and 6 shall be omitted.

4.4.2 Group B inspection. Group B inspection shall be in accordance with table II of MIL-PRF-38535.

4.4.3 Group C inspection. Group C inspection shall be in accordance with table IV of MIL-PRF-38535 and as follows:

- a. End-point electrical parameters shall be as specified in table II herein.
- b. 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 burn-in test circuit shall be maintained under document control by 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 1005 of MIL-STD-883.

4.4.4 Group D inspection. Group D inspection shall be in accordance with table V of MIL-PRF-38535. End-point electrical parameters shall be as specified in table II herein.

4.5 Methods of inspection. Methods of inspection shall be specified as follows:

4.5.1 Voltage and current. All voltages given are referenced to the microcircuit ground terminal. Currents given are conventional and positive when flowing into the referenced terminal.

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions $-55^{\circ}\text{C} \leq T_C \leq +125^{\circ}\text{C}$	Device type	Limits		Unit
				Min	Max	
High level output voltage	V_{OH}	$V_{CC} = 4.5\text{ V}$, $V_{IL} = 0.8\text{ V}$, $I_{OH} = -1.0\text{ mA}$, $V_{IH} = 2.0\text{ V}$	All	2.5		V
Low level output voltage	V_{OL}	$V_{CC} = 4.5\text{ V}$, $I_{OH} = 20\text{ mA}$, $V_{IH} = 2.0\text{ V}$, $V_{IL} = 0.8\text{ V}$	All		0.5	V
Input clamp voltage	V_{IC}	$V_{CC} = 4.5\text{ V}$, $I_{IN} = -18\text{ mA}$, $T_C = +25^{\circ}\text{C}$	All		-1.2	V
High level input current	I_{IH1}	$V_{CC} = 5.5\text{ V}$, $V_{IN} = 2.7\text{ V}$	All		20	μA
	I_{IH2}	$V_{CC} = 5.5\text{ V}$, $V_{IN} = 7.0\text{ V}$	All		100	μA
Low level input current	I_{IL1}	$V_{CC} = 5.5\text{ V}$, $V_{IL} = 0.5\text{ V}$	01	-0.03	-0.6	mA
			02	-0.12	-1.2	
			03, 04	-0.12	-0.6	
	I_{IL2}		01	-0.09	-2.4	mA
			01, 02, 03	-0.10	-2.4	
	I_{IL3}		01	-0.12	-3.6	mA
			02	-0.48	-3.6	
	I_{IL4}		01	-0.15	-4.8	mA
			02	-0.6	-4.8	
	I_{IL5}		02	-3.5	-8.4	mA
I_{IL6}	02	-4.0	-9.6	mA		
Short circuit output current <u>1/</u>	I_{OS}	$V_{CC} = 5.5\text{ V}$, $V_{OS} = 0\text{ V}$	All	-60	-150	mA
Output drive current	I_{OD}	$V_{CC} = 4.5\text{ V}$, $V_{OUT} = 2.5\text{ V}$ $V_{IN} = 5.5\text{ V}$	All	60		mA
Supply current	I_{CCL}	$V_{CC} = 5.5\text{ V}$	01		65	mA
			02		36	
	I_{CCH}		01		65	mA
			02		28	
	I_{CC}		03		89	mA
			04		89	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Propagation delay time low to high level, <u>2/</u>		V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4				
\bar{A}_i or \bar{B}_i to \bar{F}_i mode = sum	t _{PLH1}		01	3.0	14.5	ns
Any \bar{A} or \bar{B} to any \bar{F} mode = sum	t _{PLH2}		01	3.0	16.5	ns
\bar{A} or \bar{B} to C _n + 4 mode = sum	t _{PLH3}		01	5.0	17.0	ns
\bar{A} or \bar{B} to \bar{P} mode = sum	t _{PLH4}		01	2.5	9.5	ns
C _n to \bar{F}	t _{PLH5}		01	2.5	16.0	ns
\bar{A} or \bar{B} to \bar{G} mode = sum	t _{PLH6}		01	2.5	10.0	ns
C _n to C _n + 4	t _{PLH7}		01	3.0	11.5	ns
\bar{A}_i or \bar{B}_i to \bar{F}_i mode = dif	t _{PLH8}		01	3.0	17.5	ns
\bar{A} or \bar{B} to \bar{F} mode = logic	t _{PLH9}		01	3.0	14.5	ns
Any \bar{A} or \bar{B} to any \bar{F} mode = dif	t _{PLH10}		01	3.0	17.5	ns
\bar{A} or \bar{B} to \bar{G} mode = dif	t _{PLH11}		01	2.5	11.5	ns
\bar{A} or \bar{B} to C _n + 4 mode = dif	t _{PLH12}		01	5.0	18.5	ns
\bar{A} or \bar{B} to \bar{P} mode = dif	t _{PLH13}		01	2.5	11.0	ns
\bar{A} or \bar{B} to A = B mode = dif	t _{PLH14}		01	8.0	35.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
C _n to C _n + x, C _n + 4, C _n + z	t _{PLH1}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	02	3.0	11.5	ns
$\bar{P}0$, $\bar{P}1$ or $\bar{P}2$ to C _n + x, C _n + y, or C _n + z	t _{PLH2}		02	2.0	10.5	ns
$\bar{G}0$, $\bar{G}1$ or $\bar{G}2$ to C _n + x, C _n + y, or C _n + z	t _{PLH3}		02	2.0	11.0	ns
$\bar{P}1$, $\bar{P}2$ or $\bar{P}3$ to \bar{G}	t _{PLH4}		02	2.0	12.0	ns
$\bar{G}n$ to \bar{G}	t _{PLH5}		02	2.5	12.0	ns
$\bar{P}n$ to \bar{P}	t _{PLH6}		02	2.5	10.0	ns
C _i to F _i	t _{PLH1}		03	2.5	15.0	ns
A _i to F _i	t _{PLH2}		03	3.0	17.0	ns
B _i to F _i	t _{PLH3}		03	3.0	17.0	ns
S _i to F _i	t _{PLH4}		03	3.0	21.0	ns
A _i to \bar{G}	t _{PLH5}		03	3.0	13.5	ns
B _i to \bar{G}	t _{PLH6}		03	3.0	13.0	ns
A _i to \bar{P}	t _{PLH7}		03	2.0	14.0	ns
B _i to \bar{P}	t _{PLH8}		03	2.0	14.0	ns
S _i to \bar{G}	t _{PLH9}	03	3.0	17.0	ns	
S _i to \bar{P}	t _{PLH10}	03	3.0	16.0	ns	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Cn to Fi	t _{PLH1}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	04	3.0	15.0	ns
Ai to Fi	t _{PLH2}		04	4.0	18.0	ns
Bi to Fi	t _{PLH3}		04	4.0	18.0	ns
Si to Fi	t _{PLH4}		04	4.0	23.5	ns
Ai to OVR	t _{PLH5}		04	6.0	18.5	ns
Bi to OVR	t _{PLH6}		04	6.0	18.5	ns
Ai to Cn + 4	t _{PLH7}		04	3.5	11.5	ns
Bi to Cn + 4	t _{PLH8}		04	3.5	11.5	ns
Si to OVR	t _{PLH9}		04	5.0	19.5	ns
Si to Cn + 4	t _{PLH10}		04	6.5	19.5	ns
Cn to Cn + 4	t _{PLH11}		04	2.0	11.0	ns
Cn to OVR	t _{PLH12}		04	3.0	14.0	ns
Propagation delay time high to low level, <u>2/</u>						
\bar{A}_i or \bar{B}_i to \bar{F}_i mode = sum	t _{PHL1}		01	3.0	14.5	ns
Any \bar{A} or \bar{B} to any \bar{F} mode = sum	t _{PHL2}		01	3.0	14.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
\bar{A} or \bar{B} to C _n + 4 mode = sum	t _{PHL3}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	01	3.5	16.5	ns
\bar{A} or \bar{B} to \bar{P} mode = sum	t _{PHL4}		01	3.0	10.0	ns
C _n to \bar{F}	t _{PHL5}		01	2.5	12.0	ns
\bar{A} or \bar{B} to \bar{G} mode = sum	t _{PHL6}		01	2.5	10.0	ns
C _n to C _n + 4	t _{PHL7}		01	3.0	10.0	ns
\bar{A} i or \bar{B} i to \bar{F} i mode = dif	t _{PHL8}		01	3.0	14.5	ns
\bar{A} or \bar{B} to \bar{F} mode = logic	t _{PHL9}		01	3.0	15.5	ns
Any \bar{A} or \bar{B} to any \bar{F} mode = dif	t _{PHL10}		01	3.0	16.0	ns
\bar{A} or \bar{B} to \bar{G} mode = dif	t _{PHL11}		01	2.5	12.5	ns
\bar{A} or \bar{B} to C _n + 4 mode = dif	t _{PHL12}		01	4.0	17.0	ns
\bar{A} or \bar{B} to \bar{P} mode = dif	t _{PHL13}		01	2.5	11.5	ns
\bar{A} or \bar{B} to A = B mode = dif	t _{PHL14}		01	5.5	21.0	ns
C _n to C _n + x, C _n + y, C _n + z	t _{PHL1}		02	2.5	11.0	ns
\bar{P} 0, \bar{P} 1 or \bar{P} 2 to C _n + x, C _n + y, or C _n + z	t _{PHL2}		02	1.0	7.0	ns
\bar{G} 0, \bar{G} 1 or \bar{G} 2 to C _n + x, C _n + y, or C _n + z	t _{PHL3}	02	1.0	7.0	ns	
\bar{P} 1, \bar{P} 2 or \bar{P} 3 to \bar{G}	t _{PHL4}	02	2.5	10.0	ns	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
\bar{G}_n to \bar{G}	t _{PHL5}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	02	2.5	10.0	ns
\bar{P}_n to \bar{P}	t _{PHL6}		02	1.5	8.0	ns
Ci to Fi	t _{PHL1}		03	2.5	12.0	ns
Ai to Fi	t _{PHL2}		03	3.0	15.0	ns
Bi to Fi	t _{PHL3}		03	3.0	16.0	ns
Si to Fi	t _{PHL4}		03	3.0	16.0	ns
Ai to \bar{G}	t _{PHL5}		03	3.0	13.5	ns
Bi to \bar{G}	t _{PHL6}		03	3.0	13.5	ns
Ai to \bar{P}	t _{PHL7}		03	3.0	12.5	ns
Bi to \bar{P}	t _{PHL8}		03	3.0	12.5	ns
Si to \bar{G}	t _{PHL9}		03	3.0	18.0	ns
Si to \bar{P}	t _{PHL10}		03	3.0	18.0	ns
Cn to Fi	t _{PHL1}		04	2.5	11.0	ns
Ai to Fi	t _{PHL2}		04	3.5	14.0	ns
Bi to Fi	t _{PHL3}		04	3.5	14.0	ns
Si to Fi	t _{PHL4}		04	4.0	16.5	ns
Ai to OVR	t _{PHL5}		04	5.0	14.5	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Bi to OVR	t _{PHL6}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	04	5.0	14.5	ns
Ai to Cn + 4	t _{PHL7}		04	3.5	14.5	ns
Bi to Cn + 4	t _{PHL8}		04	3.5	14.5	ns
Si to OVR	t _{PHL9}		04	5.0	19.0	ns
Si to Cn + 4	t _{PHL10}		04	5.0	17.5	ns
Cn to Cn + 4	t _{PHL11}		04	2.0	12.0	ns
Cn to OVR	t _{PHL12}		04	2.5	13.0	ns

1/ Not more than one output should be shorted at a time.

2/ In Ai, Bi, Fi, and Si, i = 0, 1, 2, or 3.

TABLE II. Electrical test requirements.

MIL-PRF-38535 test requirements	Subgroups (see table III)	
	Class S devices	Class B devices
Interim electrical parameters	1	1
Final electrical test parameters	1*, 2, 3, 7, 9, 10, 11	1*, 2, 3, 7, 9
Group A test requirements	1, 2, 3, 7, 8, 9, 10, 11	1, 2, 3, 7, 8, 9, 10, 11
Group B electrical test parameters when using the method 5005 QCI option	1, 2, 3, 7, 8, 9, 10, 11	N/A
Group C end-point electrical parameters	1, 2, 3, 7, 8, 9, 10, 11	1, 2, 3
Group D end-point electrical parameters	1, 2, 3	1, 2, 3

*PDA applies to subgroup 1.

Terminal number	Device type 01		Device type 02		Device 03	Device 04
	Cases J, K, and L	Case 3	Cases E and F	Case 2	Cases R, S, and 2	Cases R, S, and 2
1	$\bar{B}0$	N/C	$\bar{G}1$	N/C	A1	A1
2	$\bar{A}0$	$\bar{B}0$	$\bar{P}1$	$\bar{G}1$	B1	B1
3	S3	$\bar{A}0$	$\bar{G}0$	$\bar{P}1$	A0	A0
4	S2	S3	$\bar{P}0$	$\bar{G}0$	B0	B0
5	S1	S2	$\bar{G}3$	$\bar{P}0$	S0	S0
6	S0	S1	$\bar{P}3$	N/C	S1	S1
7	Cn	S0	\bar{P}	$\bar{G}3$	S2	S2
8	M	N/C	GND	$\bar{P}3$	F0	F0
9	$\bar{F}0$	Cn	Cn + z	\bar{P}	F1	F1
10	$\bar{F}1$	M	\bar{G}	GND	GND	GND
11	$\bar{F}2$	$\bar{F}0$	Cn + y	N/C	F2	F2
12	GND	$\bar{F}1$	Cn + x	Cn + z	F3	F3
13	$\bar{F}3$	$\bar{F}2$	Cn	\bar{G}	\bar{G}	OVR
14	A = B	GND	$\bar{G}2$	Cn + y	\bar{P}	Cn + 4
15	\bar{P}	N/C	$\bar{P}2$	Cn + x	Cn	Cn
16	Cn + 4	$\bar{F}3$	V _{CC}	N/C	B3	B3
17	\bar{G}	A = B		Cn	A3	A3
18	$\bar{B}3$	\bar{P}		$\bar{G}2$	B2	B2
19	$\bar{A}3$	Cn + 4		$\bar{P}2$	A2	A2
20	$\bar{B}2$	\bar{G}		V _{CC}	V _{CC}	V _{CC}
21	$\bar{A}2$	$\bar{B}3$				
22	$\bar{B}1$	N/C				
23	$\bar{A}1$	$\bar{A}3$				
24	V _{CC}	$\bar{B}2$				
25		$\bar{A}2$				
26		$\bar{B}1$				
27		$\bar{A}1$				
28		V _{CC}				

FIGURE 1. Terminal connections.

Device type 01

Mode select inputs				Active LOW operands & Fn Outputs		Active High operands & Fn Outputs	
S3	S2	S1	S0	Logic (M = H)	Arithmetic** (M = L) (Cn = L)	Logic (M = H)	Arithmetic** (M = L) (Cn = H)
L	L	L	L	\bar{A}	A minus 1	\bar{A}	A
L	L	L	H	$\bar{A}\bar{B}$	AB minus 1	$\bar{A} + \bar{B}$	A + B
L	L	H	L	$\bar{A} + B$	$A\bar{B}$ minus 1	$\bar{A} B$	A + \bar{B}
L	L	H	H	Logic 1	minus 1	Logic 0	minus 1
L	H	L	L	$\bar{A} + \bar{B}$	A plus (A + \bar{B})	$\bar{A}\bar{B}$	A plus $A\bar{B}$
L	H	L	H	\bar{B}	AB plus (A + \bar{B})	\bar{B}	(A + B) plus $A\bar{B}$
L	H	H	L	$\bar{A} \oplus \bar{B}$	A minus B minus 1	$A \oplus B$	A minus B minus 1
L	H	H	H	$A + \bar{B}$	A + \bar{B}	$A\bar{B}$	$A\bar{B}$ minus 1
H	L	L	L	$\bar{A} B$	A plus (A + B)	$\bar{A} + B$	A plus AB
H	L	L	H	$A \oplus B$	A plus B	$\bar{A} \oplus \bar{B}$	A plus B
H	L	H	L	B	$A\bar{B}$ plus (A + B)	B	(A + \bar{B}) plus AB
H	L	H	H	A + B	A + B	AB	AB minus 1
H	H	L	L	Logic 0	A plus A*	Logic 1	A plus A*
H	H	L	H	$A\bar{B}$	AB plus A	$A + \bar{B}$	(A + B) plus A
H	H	H	L	AB	$A\bar{B}$ minus A	A + B	(A + \bar{B}) plus A
H	H	H	H	A	A	A	A minus 1

* Each bit is shifted to the next more significant position.

** Arithmetic operations expressed in 2's complement notation.

H = HIGH voltage level.

L = LOW voltage level.

FIGURE 2. Truth tables.

Device type 02

Cn	Inputs								Outputs				
	$\bar{G} 0$	$\bar{P} 0$	$\bar{G} 1$	$\bar{P} 1$	$\bar{G} 2$	$\bar{P} 2$	$\bar{G} 3$	$\bar{P} 3$	Cn + x	Cn + y	Cn + z	\bar{G}	\bar{P}
X	H	H							L				
L	H	X							L				
X	L	X							H				
H	X	L							H				
X	X	X	H	H						L			
X	H	H	H	X						L			
L	H	X	H	X						L			
X	X	X	L	X						H			
X	L	X	X	L						H			
H	X	L	X	L						H			
X	X	X	X	X	H	H					L		
X	X	X	H	H	H	X					L		
X	H	H	H	X	H	X					L		
L	H	X	H	X	H	X					L		
X	X	X	X	X	L	X					H		
X	X	X	L	X	X	L					H		
X	L	X	X	L	X	L					H		
H	X	L	X	L	X	L					H		
	X		X	X	X	X	H	H				H	
	X		X	X	H	H	H	X				H	
	X		H	H	H	X	H	X				H	
	H		H	X	H	X	H	X				H	
	X		X	X	X	X	L	X				L	
	X		X	X	L	X	X	L				L	
	X		L	X	X	L	X	L				L	
	L		X	L	X	L	X	L				L	
		H		X		X		X					H
		X		H		X		X					H
		X		X		H		X					H
		X		X		X		H					H
		L		L		L		L					L

H = HIGH voltage level
 L = LOW voltage level
 X = Immaterial

FIGURE 2. Truth tables - Continued.

Device type 03

Function	Inputs						Outputs						
	S0	S1	S2	Cn	An	Bn	F0	F1	F2	F3	\bar{G}	\bar{P}	
Clear	0	0	0	X	X	X	0	0	0	0	0	0	
B minus A	1	0	0	0	0	0	1	1	1	1	1	0	
				0	0	1	0	1	1	1	1	0	0
				0	1	0	0	0	0	0	0	1	1
				0	1	1	1	1	1	1	1	1	0
				1	0	0	0	0	0	0	0	1	0
				1	0	1	1	1	1	1	1	0	0
				1	1	0	1	0	0	0	0	1	1
A minus B	0	1	0	0	0	0	1	1	1	1	1	0	
				0	0	1	0	0	0	0	0	1	1
				0	1	0	0	1	1	1	1	0	0
				0	1	1	1	1	1	1	1	1	0
				1	0	0	0	0	0	0	0	1	0
				1	0	1	1	1	0	0	0	1	1
				1	1	0	1	1	1	1	1	0	0
A plus B	1	1	0	0	0	0	0	0	0	0	1	1	
				0	0	1	1	1	1	1	1	0	
				0	1	0	1	1	1	1	1	1	0
				0	1	1	0	1	1	1	1	0	0
				1	0	0	1	0	0	0	0	1	1
				1	0	1	0	0	0	0	0	1	0
				1	1	0	0	0	0	0	0	1	0
A \oplus B	0	0	1	X	0	0	0	0	0	0	0	1	1
				X	0	1	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	1	0
				X	1	1	0	0	0	0	0	0	0
				X	1	1	1	0	0	0	0	0	0
				X	1	1	1	1	1	1	1	1	0
				X	1	1	1	1	1	1	1	0	0
A + B	1	0	1	X	0	0	0	0	0	0	0	1	1
				X	0	1	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	1	1
				X	1	1	1	1	1	1	1	1	0
AB	0	1	1	X	0	0	0	0	0	0	0	0	0
				X	0	1	0	0	0	0	0	1	1
				X	1	0	0	0	0	0	0	0	0
				X	1	1	1	1	1	1	1	1	0
Preset	1	1	1	X	0	0	1	1	1	1	1	1	1
				X	0	1	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	1	1
				X	1	1	1	1	1	1	1	1	0

1 = HIGH voltage level

0 = LOW voltage level

X = Immaterial

FIGURE 2. Truth tables - Continued.

Device type 04

Function	Inputs						Outputs					
	S0	S1	S2	Cn	An	Bn	F0	F1	F2	F3	OVR	Cn + 4
Clear	0	0	0	0	X	X	0	0	0	0	1	1
				1	X	X	0	0	0	0	0	1
B minus A	1	0	0	0	0	0	1	1	1	1	0	0
				0	0	1	0	1	1	1	0	1
				0	1	0	0	0	0	0	0	0
				0	1	1	1	1	1	1	0	0
				1	0	0	0	0	0	0	0	0
				1	0	1	1	1	1	1	0	1
				1	1	0	1	0	0	0	0	0
				1	1	1	0	0	0	0	0	0
A minus B	0	1	0	0	0	0	1	1	1	1	0	0
				0	0	1	0	0	0	0	0	0
				0	1	0	0	1	1	1	0	1
				0	1	1	1	1	1	1	0	0
				1	0	0	0	0	0	0	0	1
				1	0	1	1	0	0	0	0	0
				1	1	0	1	1	1	1	0	1
				1	1	1	0	0	0	0	0	0
A plus B	1	1	0	0	0	0	0	0	0	0	0	0
				0	0	1	1	1	1	1	0	0
				0	1	0	1	1	1	1	0	0
				0	1	1	0	1	1	1	0	1
				1	0	0	1	0	0	0	0	0
				1	0	1	0	0	0	0	0	0
				1	1	0	0	0	0	0	0	0
				1	1	1	1	1	1	1	0	1
A ⊕ B	0	0	1	X	0	0	0	0	0	0	0	0
				X	0	1	1	1	1	1	0	0
				0	1	0	1	1	1	1	0	0
				X	1	1	0	0	0	0	1	1
				1	1	0	1	1	1	1	1	1
A + B	1	0	1	X	0	0	0	0	0	0	0	0
				X	0	1	1	1	1	1	0	0
				X	1	0	1	1	1	1	0	0
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1
AB	0	1	1	X	0	0	0	0	0	0	1	1
				X	0	1	0	0	0	0	0	0
				X	1	0	0	0	0	0	1	1
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1
Preset	1	1	1	X	0	0	1	1	1	1	0	0
				X	0	1	1	1	1	1	0	0
				X	1	0	1	1	1	1	0	0
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1

1 = HIGH voltage level
0 = LOW voltage level
X = Immaterial

FIGURE 2. Truth tables - Continued.

DEVICE TYPE 01

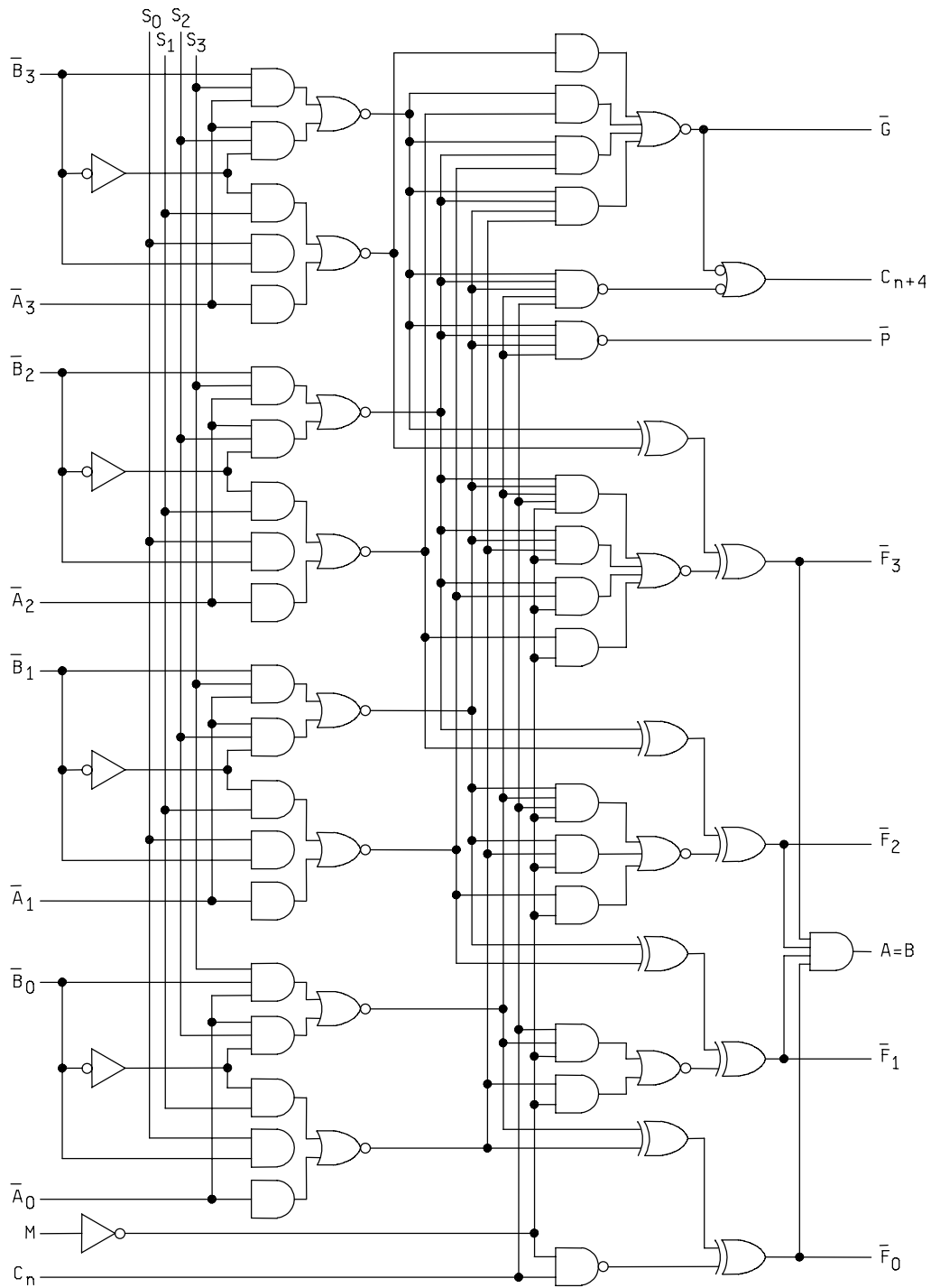


FIGURE 3. Logic diagram.

DEVICE TYPE 02

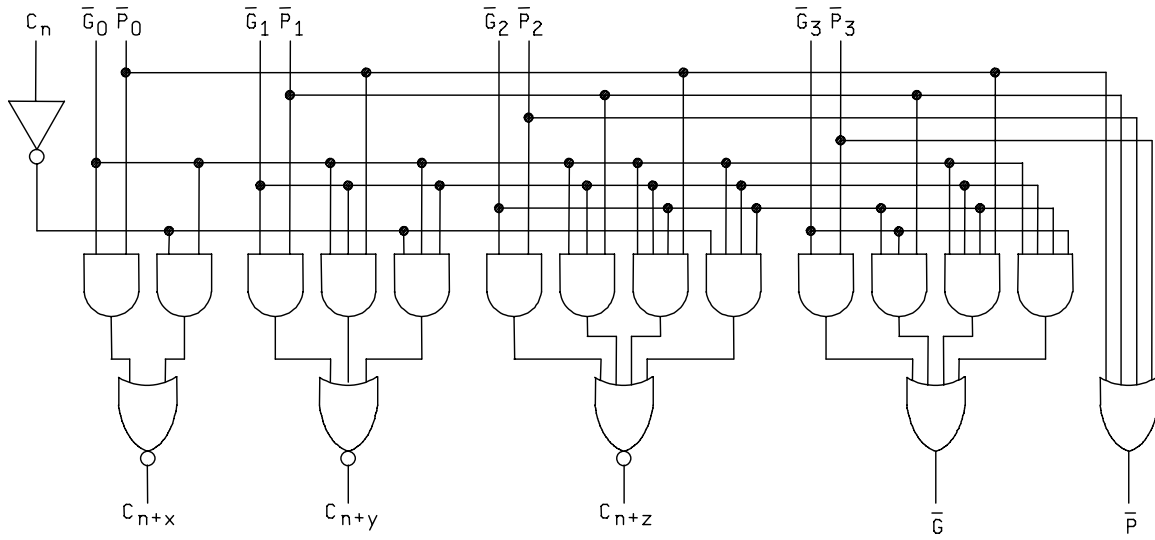
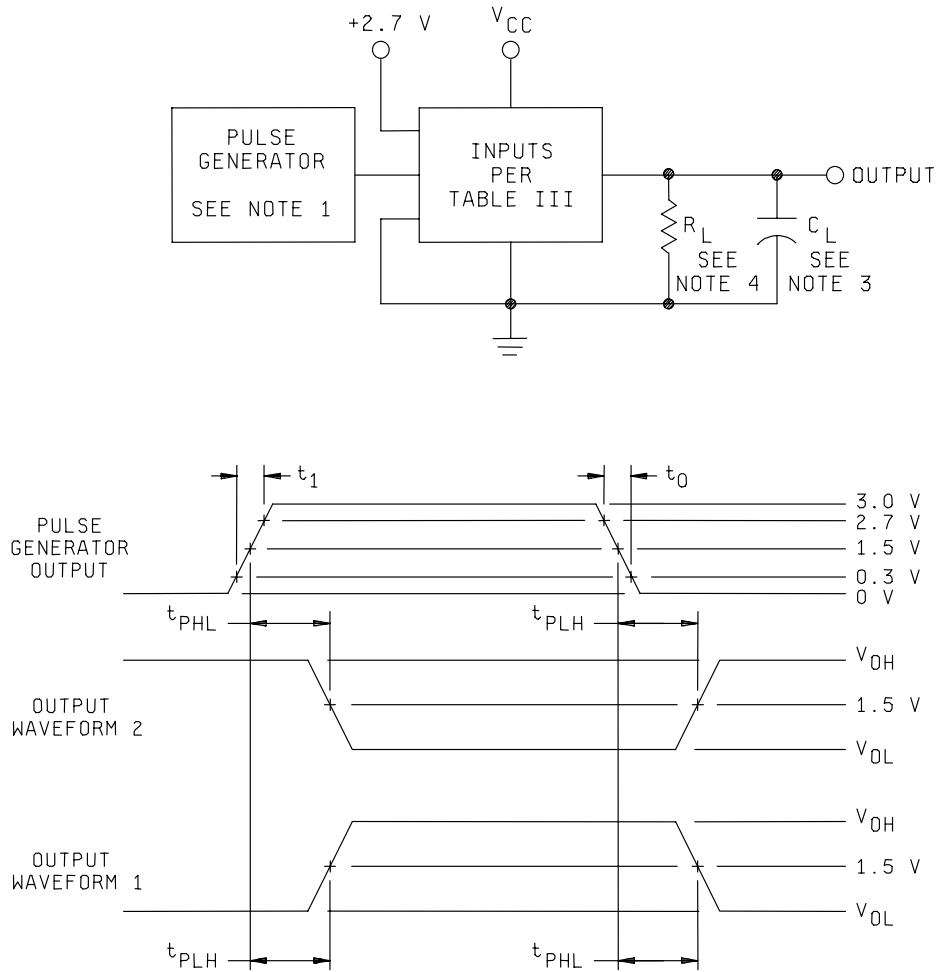


FIGURE 3. Logic diagram - Continued.



NOTES:

1. Pulse generator has the following characteristics: $t_1 = t_0 \leq 2.5$ ns, $PRR \leq 1$ MHz, $Z_{OUT} \approx 50\Omega$.
2. Inputs not under test are at ground.
3. $C_L = 50$ pF $\pm 10\%$.
4. $R_L = 499\Omega \pm 5\%$.
5. Voltage measurements are to be made with respect to network ground terminal.

FIGURE 4. Switching time waveforms (circuit for all device types).

TABLE III. Group A inspection for device type 01.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open)												Measured terminal	Limits		Unit																						
				1	2	3	4	5	6	7	8	9	10	11	12		13	14		Min	Max																				
1 Tc = 25°C	V _{OH}	3006	Case 3 I/ Test no.	B 0	A 0	S 3	S 2	S 1	S 0	C n	M	F 0	F 1	F 2	GND	G	2.5	V																							
				0.8 V	0.8 V	2.0 V	0.8 V	0.8 V	0.8 V																																
				2.0 V	2.0 V	"	2.0 V	0.8 V	0.8 V																																
				2.0 V	"	"	"	2.0 V	2.0 V																																
				0.8 V	"	"	"	"	"				0.8 V	2.0 V	-1.0 mA																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
				"	"	"	"	"	"				"	"	"																										
					V _{OL}	3007	Case 3 I/ Test no.	B 0	A 0	S 3	S 2	S 1	S 0	C n	M	F 0	F 1	F 2	GND	G	0.5	V																			
								2.0 V	2.0 V	2.0 V	0.8 V	0.8 V	0.8 V																												
"	"	"	0.8 V					0.8 V	2.0 V																																
"	"	"	0.8 V					2.0 V	2.0 V																																
"	"	"	"					"	"				"	2.0 V	2.0 V	20 mA																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
"	"	"	"					"	"				"	"	"	"																									
	I _{HI}	3010	Case 3 I/ Test no.					B 0	A 0	S 3	S 2	S 1	S 0	C n	M	F 0	F 1	F 2	GND	M	20 μ A																				
								0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V																												
				"	2.7 V	"	"	"	"																																
				"	0.0 V	"	"	"	"																																
				"	"	"	"	"	"																																
				"	"	"	"	"	"																																
				"	"	"	"	"	"																																
				"	"	"	"	"	"																																
				"	"	"	"	"	"																																
				"	"	"	"	"	"																																
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				"	"	"	"	"	"																																
"	"	"	"	"	"																																				

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 1/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit		
				B 0	A 0	S 3	S 2	S 1	S 0	C n	M	F 0	F 1	F 2	Min		Max				
1 Tc = 25°C	I _{HH}	3010	39	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	2.7 V	0.0 V	0.0 V					S 0		20	μA		
			40	0.0 V	"	2.7 V	"	0.0 V	0.0 V	"	"	"	"	"	"	"	S 3			"	
			41	5.5 V	"	0.0 V	"	2.7 V	"	"	"	"	"	"	"	"	"	S 1			"
			42	"	"	0.0 V	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	S 2			"
			43	"	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	2.7 V	5.5 V					C n			"
			44	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	7.0 V	7.0 V				M	100		"
			45	"	7.0 V	"	"	"	"	"	"	"	0.0 V					A 0			"
			46	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 1			"
			47	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2			"
			48	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3			"
	I _{HE}		49	7.0 V	"	"	"	"	"	"	"	"	"	"	"	B 0			"		
			50	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	B 1			"	
			51	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2			"	
			52	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3			"	
			53	"	"	"	"	"	"	7.0 V	7.0 V	"	"	"	"	"	S 0			"	
			54	"	"	7.0 V	"	"	0.0 V	0.0 V	"	"	"	"	"	"	S 3			"	
			55	5.5 V	"	0.0 V	"	7.0 V	"	"	"	"	"	"	"	"	S 1			"	
			56	"	"	0.0 V	7.0 V	0.0 V	"	"	"	"	"	"	"	"	S 2			"	
			57	"	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	7.0 V	5.5 V	5.5 V			C n			"	
			58	"	"	"	"	"	"	"	"	5.5 V	0.5 V	0.5 V			M	2/	2/	mA	
	I _{LI} I _{LI2}		59	0.5 V	"	"	"	"	"	"	5.5 V	5.5 V				B 0			"		
			60	5.5 V	"	"	"	"	"	"	"	"	"	"	"	B 1			"		
			61	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2			"	
			62	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3			"	
			63	"	0.5 V	"	"	"	"	"	"	"	"	"	"	"	A 0			"	
			64	"	5.5 V	"	"	"	"	"	"	"	"	"	"	"	A 1			"	
			65	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2			"	
			66	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3			"	
			67	"	"	"	"	"	"	"	0.5 V	"	"	"	"	"	S 0			"	
			68	"	"	0.5 V	"	"	5.5 V	5.5 V	"	"	"	"	"	"	S 3			"	
	I _{LI3}		69	0.0 V	"	5.5 V	"	0.5 V	"	"	"	"	"	"	"	S 1			"		
			70	"	"	0.0 V	0.5 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V			S 2			"		
			71	"	0.0 V	0.0 V	0.0 V	"	"	"	"	0.5 V	0.0 V			C n			"		
			72	"	"	5.5 V	"	"	"	"	"	"	"	"	"	"	G	-60	-150	"	
			73	"	"	0.0 V	"	"	"	"	"	0.0 V	"	"	"	"	C n + 4			"	
			74	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V				P			"	
			75	"	"	"	"	"	"	"	"	"	"	0.0 V			F 0			"	
			76	"	"	"	"	"	"	"	"	"	"	"	0.0 V		F 1			"	
			77	"	"	"	"	"	"	"	"	"	"	"	"	0.0 V	F 2			"	
			78	"	"	"	"	"	"	"	"	"	"	"	"	"	F 3			"	

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit			
				16	17	18	19	20	21	22	23	24	28	Min	Max							
1	I_{IH1}	3010	39	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	S0		20	μ A			
				40						0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.5 V	S3				
	I_{IH2}		41						5.5 V		5.5 V		5.5 V			S1						
				42														S2				
				43															Ch			
				44								0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V		M		100	
				45															A 0			
				46															A 1			
				47											7.0 V				A 2			
				48									7.0 V		0.0 V				A 3			
				49									0.0 V						B 0			
				50												7.0 V			B 1			
	I_{IH1}		51								7.0 V					B 2						
				52									0.0 V				B 3					
				53								0.0 V						S0				
				54								0.0 V						S3				
				55								5.5 V		5.5 V		5.5 V		S1				
				56														S2				
				57											5.5 V		5.5 V		Ch			
				58	3009														M	2/	2/	mA
				59															B 0			
					I_{IH2}		60													B 1		
61											0.5 V		5.5 V		5.5 V			B 2				
62												0.5 V		5.5 V				B 3				
63												5.5 V						A 0				
64																	0.5 V		A 1			
65															0.5 V		5.5 V		A 2			
66													0.5 V		5.5 V				A 3			
67													5.5 V						S0			
68																			S3			
69													0.0 V		0.0 V		0.0 V		S1			
	I_{IH4}		70													S2						
				71														Ch				
				72	3011						0.0 V	5.5 V	5.5 V					G		-60	-150	
				73								0.0 V	0.0 V						Cn+4			
				74							0.0 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V		P			
				75															F 0			
				76															F 1			
				77															F 2			
				78															F 3			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 I/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit		
				B 0	A 0	S3	S2	S1	S0	Ch	M	F 0	F 1	F 2	Min		Max				
9 Tc = 25°C	t _{PHL1}	3003 Fig. 4	129	IN	2.7V	0.0V	0.0V	0.0V	2.7V	0.0V	0.0V	OUT	OUT	OUT	GND	A 0 to F 0	3.0	10.0	ns		
			130	"	0.0V	"	"	"	"	"	"	"	"	OUT	"	"	A 1 to F 1	"	"	"	
			131	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	A 2 to F 2	"	"	"
			132	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
			133	IN	"	"	"	"	"	"	"	"	OUT	"	"	"	"	B 0 to F 0	"	"	"
			134	0.0V	"	"	"	"	"	"	"	"	"	"	OUT	"	"	B 1 to F 1	"	"	"
			135	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	B 2 to F 2	"	"	"
			136	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"
			137	"	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	A 0 to F 0	"	9.0	"
			138	"	0.0V	"	"	"	"	"	"	"	"	"	OUT	"	"	A 1 to F 1	"	"	"
			139	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	A 2 to F 2	"	"	"
			140	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
			141	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	"	B 0 to F 0	"	"	"
			142	0.0V	"	"	"	"	"	"	"	"	"	"	OUT	"	"	B 1 to F 1	"	"	"
143	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	B 2 to F 2	"	"	"			
144	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
145	IN	"	2.7V	"	"	"	"	"	"	2.7V	"	"	"	"	B 0 to F 3	4.0	10.0	"			
146	0.0V	"	IN	"	"	"	"	"	"	0.0V	"	"	OUT	"	A 0 to F 1	"	"	"			
147	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	A 0 to F 2	"	"	"			
148	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 3	"	"	"			
149	"	"	2.7V	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 3	"	"	"			
150	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 1 to F 2	"	"	"			
151	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 3	"	"	"			
152	IN	"	"	"	"	"	"	"	"	2.7V	"	"	"	"	B 0 to F 3	"	10.5	"			
153	0.0V	"	IN	"	"	"	"	"	"	0.0V	"	"	OUT	"	A 0 to F 1	"	"	"			
154	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 0 to F 2	"	"	"			
155	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 3	"	"	"			
156	"	"	2.7V	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 3	"	"	"			
157	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 1 to F 2	"	"	"			
158	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 3	"	"	"			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit	
				16	17	18	19	20	21	22	23	24	Min	Max						
9 Tc = 25°C	t_{PHL1}	3003 Fig. 4	Case 3_1	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1		A 0 to F 0	3.0	10.0	ns	
			Test no. 129							0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	A 1 to F 1	"	"	"
			130														A 2 to F 2	"	"	"
			131														A 3 to F 3	"	"	"
			132	OUT								IN					B 0 to F 0	"	"	"
			133									0.0V					B 1 to F 1	"	"	"
			134												IN		B 2 to F 2	"	"	"
			135										IN				B 3 to F 3	"	"	"
			136	OUT							IN		0.0V				A 0 to F 0	"	9.0	"
			137								0.0V						A 1 to F 1	"	"	"
			138													IN	A 2 to F 2	"	"	"
			139											IN			A 3 to F 3	"	"	"
			140	OUT										0.0V			B 0 to F 0	"	"	"
			141										0.0V				B 1 to F 1	"	"	"
			142												IN		B 2 to F 2	"	"	"
			143													0.0V	B 3 to F 3	"	"	"
			144	OUT								IN		0.0V			B 0 to F 0	"	"	"
			145	OUT								0.0V	2.7V				B 1 to F 1	4.0	10.0	"
146										0.0V				A 0 to F 0	"	"	"			
147											0.0V			A 0 to F 0	"	"	"			
148	OUT										0.0V			A 0 to F 0	"	"	"			
149	OUT											IN		A 0 to F 0	"	"	"			
150											0.0V			A 0 to F 0	"	"	"			
151	OUT										2.7V			A 0 to F 0	"	"	"			
152	OUT									2.7V				A 0 to F 0	"	10.5	"			
153										0.0V				A 0 to F 0	"	"	"			
154											0.0V			A 0 to F 0	"	"	"			
155	OUT										2.7V			A 0 to F 0	"	"	"			
156	OUT											IN		A 0 to F 0	"	"	"			
157											0.0V			A 0 to F 0	"	"	"			
158	OUT										2.7V			A 0 to F 0	"	"	"			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 I/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit	
				B 0	A 0	S3	S2	S1	S0	Ch	M	F 0	F 1	F 2	Min		Max			
9 Tc = 25°C	t _{PHL3}	3003 Fig. 4	159	0.0 V	IN	2.7 V	0.0 V	0.0 V	2.7 V	0.0 V	0.0 V					A 0 to Ch+4	3.5	12.0	ns	
			160	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to Ch+4	"	"	"
			161	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Ch+4	"	"	"
			162	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Ch+4	"	"	"
			163	IN	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to Ch+4	"	"	"
			164	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to Ch+4	"	"	"
			165	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Ch+4	"	"	"
			166	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Ch+4	"	"	"
			167	0.0 V	IN	"	"	"	"	"	"	"	"	"	"	"	A 0 to Ch+4	5.0	13.0	"
			168	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to Ch+4	"	"	"
			169	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Ch+4	"	"	"
			170	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Ch+4	"	"	"
			171	IN	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to Ch+4	"	"	"
			172	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to Ch+4	"	"	"
			173	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Ch+4	"	"	"
			174	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Ch+4	"	"	"
			175	"	IN	"	"	"	"	"	"	"	"	"	"	"	A 0 to P	3.0	7.5	"
			176	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"
			177	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"
178	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"			
179	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"			
180	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"			
181	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"	"			
182	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to P	"	"	"			
183	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	"	A 0 to P	2.5	"	"			
184	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"			
185	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"			
186	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"			
187	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"			
188	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"			
189	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"	"			
190	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to P	"	"	"			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit		
																	16	17		Min	Max
9 Tc = 25°C	t_{PHL3}	3003 Fig. 4	Case 3_1	F 3	A = B	P	Ch+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{cc}	A 0 to Ch+4	3.5	12.0	ns		
			Test no. 159							2.7 V	0.0 V	2.7 V	0.0 V	2.7 V	0.0 V		A 1 to Ch+4	"	"	"	
			160									0.0 V	0.0 V	2.7 V	0.0 V		A 2 to Ch+4	"	"	"	
			161								0.0 V	IN	2.7 V	0.0 V			A 3 to Ch+4	"	"	"	
			162								2.7 V	0.0 V					B 0 to Ch+4	"	"	"	
			163												IN		B 1 to Ch+4	"	"	"	
			164												2.7 V		B 2 to Ch+4	"	"	"	
			165								IN		2.7 V				B 3 to Ch+4	"	"	"	
			166										2.7 V				A 0 to Ch+4	5.0	13.0	"	
			167														A 1 to Ch+4	"	"	"	
			168												0.0 V	IN				"	
			169										0.0 V	IN	2.7 V	0.0 V		A 2 to Ch+4	"	"	"
			170									0.0 V	2.7 V	0.0 V			A 3 to Ch+4	"	"	"	
			171									2.7 V					B 0 to Ch+4	"	"	"	
			172												IN		B 1 to Ch+4	"	"	"	
			173										IN		2.7 V		B 2 to Ch+4	"	"	"	
			174									IN			2.7 V		B 3 to Ch+4	"	"	"	
			175									0.0 V			0.0 V		A 0 to P	3.0	7.5	"	
			176										0.0 V		2.7 V	IN		A 1 to P	"	"	"
177										2.7 V	IN	0.0 V	0.0 V		A 2 to P	"	"	"			
178									2.7 V	IN	0.0 V			A 3 to P	"	"	"				
179									0.0 V					B 0 to P	"	"	"				
180												IN	2.7 V		B 1 to P	"	"	"			
181										IN	2.7 V	0.0 V	0.0 V		B 2 to P	"	"	"			
182									IN	2.7 V	0.0 V			B 3 to P	"	"	"				
183									0.0 V	0.0 V				A 0 to P	2.5	"	"				
184												2.7 V	IN		A 1 to P	"	"	"			
185										2.7 V	IN	0.0 V	0.0 V		A 2 to P	"	"	"			
186									2.7 V	IN	0.0 V			A 3 to P	"	"	"				
187									0.0 V					B 0 to P	"	"	"				
188												IN	2.7 V		B 1 to P	"	"	"			
189										IN	2.7 V	0.0 V	0.0 V		B 2 to P	"	"	"			
190									IN	2.7 V	0.0 V			B 3 to P	"	"	"				

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit				
				Case 3 I/	Test no.	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1		F 2	Min		Max			
9 Tc = 25°C	t _{PHL5} t _{PH5} t _{PHL6} t _{PHL6} t _{PHL7} t _{PH7} t _{PHL8} t _{PH8}	3003 Fig. 4	191	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	2.7 V	IN	0.0 V	OUT	F 0	F 1	F 2	Cn to F 0	3.0	8.5	ns				
				"	2.7 V	"	"	"	"	IN	"	OUT	"	"	"	"	"	Cn to F 0	3.0	8.5	"		
				"	"	"	"	"	"	"	"	"	0.0 V	"	"	"	"	"	A 0 to G	2.5	7.5	"	
				"	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"	
				"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"	
				"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"	
				"	0.0 V	IN	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to G	"	"	"	
				"	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"	
				"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"	
				"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"	
				t _{PHL7} t _{PH7} t _{PHL8} t _{PH8}	t _{PHL7} t _{PH7} t _{PHL8} t _{PH8}	t _{PHL7} t _{PH7} t _{PHL8} t _{PH8}	209	0.0 V	2.7 V	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
								"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"
"	"	"	"					"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"		
"	"	"	"					"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"		
"	IN	"	"					"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"		
"	2.7 V	0.0 V	"					"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"		
"	"	0.0 V	"					"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"		
"	"	2.7 V	2.7 V					2.7 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	A 0 to F 0	"	11.0	"	
"	"	"	"					"	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"	
"	"	"	"					"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"	
"	"	"	"					"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"	
"	"	"	"					"	"	"	"	"	"	"	"	"	"	"	B 0 to F 0	"	"	"	
t _{PH8}	t _{PH8}	t _{PH8}	219	"	IN	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"				
				"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	12.0	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to F 0	"	"	"		
t _{PH8}	t _{PH8}	t _{PH8}	220	"	2.7 V	"	"	"	"	"	"	"	"	"	"	B 1 to F 1	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"		
t _{PH8}	t _{PH8}	t _{PH8}	221	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to F 0	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to F 1	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"		
t _{PH8}	t _{PH8}	t _{PH8}	222	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to F 1	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"		
t _{PH8}	t _{PH8}	t _{PH8}	223	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to F 0	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to F 1	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"		
t _{PH8}	t _{PH8}	t _{PH8}	224	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to F 1	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"		
t _{PH8}	t _{PH8}	t _{PH8}	225	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to F 0	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to F 1	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"		
t _{PH8}	t _{PH8}	t _{PH8}	226	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to F 1	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 0	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"			
				"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 2	"	"	"		

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit			
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max				
9 Tc = 25°C	t_{PHL5} t_{PH5} t_{PHL6} t_{PH6}	3003 Fig. 4	Case 3 J Test no.	F 3	A = B	P	Cn+4	G	B 3 0.0V	A 3 2.7V	B 2 0.0V	A 2 2.7V	B 1 0.0V	A 1 2.7V	V _{cc} 5.0V	Cn to F 0	3.0	8.5	ns			
								OUT		0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V		Cn to F 0	3.0	8.5	"	
												2.7V	0.0V	2.7V	0.0V	2.7V	0.0V		A 0 to G	2.5	7.5	"
														2.7V	0.0V	0.0V	0.0V		A 1 to G	"	"	"
														0.0V	IN	2.7V	0.0V		A 2 to G	"	"	"
													0.0V	IN	2.7V	0.0V	"		A 3 to G	"	"	"
													2.7V	0.0V	"	"	"		B 0 to G	"	"	"
															IN	"	2.7V	"	B 1 to G	"	"	"
																2.7V	"	"	B 2 to G	"	"	"
													IN	"	"	"	"	"	B 3 to G	"	"	"
													2.7V	"	"	"	"	"	A 0 to G	"	"	"
																0.0V	IN	"	A 1 to G	"	"	"
																0.0V	2.7V	0.0V	A 2 to G	"	"	"
													0.0V	IN	2.7V	0.0V	"	"	A 3 to G	"	"	"
													2.7V	0.0V	"	"	"	"	B 0 to G	"	"	"
															IN	"	IN	"	B 1 to G	"	"	"
																2.7V	"	"	B 2 to G	"	"	"
													IN	"	2.7V	"	"	"	B 3 to G	"	"	"
																	2.7V	"	A 0 to G	"	"	"
													0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"
																2.7V	"	"	A 2 to G	"	"	"
													0.0V	IN	2.7V	0.0V	"	"	A 3 to G	"	"	"
													2.7V	0.0V	"	"	"	"	B 0 to G	"	"	"
															IN	"	IN	"	B 1 to G	"	"	"
																2.7V	"	"	B 2 to G	"	"	"
													IN	"	2.7V	"	"	"	B 3 to G	"	"	"
													2.7V	"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
												2.7V	"	"	A 2 to G	"	"	"				
													2.7V	"	A 3 to G	"	"	"				
												2.7V	"	"	B 0 to G	"	"	"				
													2.7V	"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				
														"	A 0 to G	"	"	"				
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	A 1 to G	"	"	"				
													2.7V	"	A 2 to G	"	"	"				
														"	A 3 to G	"	"	"				
													2.7V	"	B 0 to G	"	"	"				
														"	B 1 to G	"	"	"				
													0.0V	"	B 2 to G	"	"	"				
									IN	"	0.0V	"	"	"	B 3 to G	"	"	"				

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 I/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit	
				B 0	A 0	S3	S2	S1	S0	Ch	M	F 0	F 1	F 2	Min		Max			
9 Tc = 25°C	t_{PHL9}	3003 Fig. 4	227	0.0 V	IN	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	2.7 V	OUT	OUT	OUT	GND	A 0 to F 0	3.0	10.0	ns	
			228	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 1	"	"	"
			229	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 2 to F 2	"	"	"
			230	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
			231	IN	"	"	"	"	"	"	"	"	"	OUT	"	"	B 0 to F 0	"	"	"
			232	0.0 V	"	"	"	"	"	"	"	"	"	"	OUT	"	B 1 to F 1	"	"	"
			233	"	"	"	"	"	"	"	"	"	"	"	"	OUT	B 2 to F 2	"	"	"
			234	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"
			235	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	A 0 to F 0	3.5	9.5	"
			236	"	0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	A 1 to F 1	"	"	"
			237	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 2 to F 2	"	"	"
			238	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 3	"	"	"
			239	IN	"	"	"	"	"	"	"	"	"	"	OUT	"	B 0 to F 0	"	"	"
			240	0.0 V	"	"	"	"	"	"	"	"	"	"	"	OUT	B 1 to F 1	"	"	"
241	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to F 2	"	"	"			
242	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 3	"	"	"			
243	IN	2.7 V	"	"	"	"	"	"	"	2.7 V	0.0 V	"	"	"	B 0 to F 3	3.0	12.0	"		
244	2.7 V	IN	"	"	"	"	"	"	"	0.0 V	"	"	OUT	"	A 0 to F 1	"	"	"		
245	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 0 to F 2	"	"	"		
246	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 3	"	"	"		
247	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 3	"	"	"		
248	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to F 2	"	"	"		
249	0.0 V	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	A 1 to F 3	"	"	"		
250	IN	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	B 0 to F 3	4.0	"	"		
251	2.7 V	IN	"	"	"	"	"	"	"	0.0 V	"	"	OUT	"	A 0 to F 1	"	"	"		
252	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 0 to F 2	"	"	"		
253	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to F 3	"	"	"		
254	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to F 3	"	"	"		
255	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	OUT	A 1 to F 2	"	"	"		
256	0.0 V	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	A 1 to F 3	"	"	"		

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit			
				16	17	18	19	20	21	22	23	24	28	Min	Max							
9 Tc = 25°C	t_{PHL9}	3003 Fig. 4	Case 3 J/ Test no.	F 3	A = B	P	Cn+4	G	B 3 0.0V	A 3 0.0V	B 2 0.0V	A 2 0.0V	B 1 0.0V	A 1 0.0V	V _{cc} 5.0V	A 0 to F 0	3.0	10.0	ns			
																		A 1 to F 1	"	"	"	
																			A 2 to F 2	"	"	"
																			A 3 to F 3	"	"	"
													0.0V						B 0 to F 0	"	"	"
																IN			B 1 to F 1	"	"	"
															IN		0.0V		B 2 to F 2	"	"	"
												IN			0.0V				B 3 to F 3	"	"	"
												0.0V							A 0 to F 0	3.5	9.5	"
																	IN		A 1 to F 1	"	"	"
																	0.0V		A 2 to F 2	"	"	"
					t_{PHL10}			OUT						IN						A 3 to F 3	"	"
OUT																		B 0 to F 0	"	"	"	
OUT															IN			B 1 to F 1	"	"	"	
OUT																0.0V		B 2 to F 2	"	"	"	
OUT											IN							B 3 to F 3	"	"	"	
OUT											0.0V							A 0 to F 0	3.0	12.0	"	
OUT																		A 1 to F 1	"	"	"	
OUT																2.7V		A 0 to F 2	"	"	"	
OUT																		A 0 to F 3	"	"	"	
OUT															IN			A 2 to F 3	"	"	"	
OUT															0.0V			A 1 to F 2	"	"	"	
	t_{PH10}							OUT												A 1 to F 3	"	"
				OUT														B 0 to F 3	4.0	"	"	
				OUT														A 0 to F 1	"	"	"	
				OUT														A 0 to F 2	"	"	"	
				OUT														A 0 to F 3	"	"	"	
				OUT											IN			A 2 to F 3	"	"	"	
				OUT											0.0V			A 1 to F 2	"	"	"	
				OUT											0.0V			A 1 to F 3	"	"	"	

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit			
				Case 3 J	Test no.	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2		Min	Max				
9 Tc = 25°C	t_{PHL1}	3003 Fig. 4	257	B 0	IN	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	0.0 V					A 0 to G	2.5	10.0	ns			
				2	3	4	5	6	7	8	9	10	11	12	13	14						
				258	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
				259	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
				260	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
				261	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
				262	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
				263	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
				264	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
				265	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to G	3.0	9.0	"
				266	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
				267	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
				268	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
				269	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
				270	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
				271	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
				272	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
				273	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to Cn+4	5.0	13.0	"
				274	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to Cn+4	"	"	"
				275	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn+4	"	"	"
				276	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn+4	"	"	"
				277	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn+4	"	"	"
				278	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn+4	"	"	"
				279	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn+4	"	"	"
				280	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn+4	"	"	"
				281	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	"	"	A 0 to Cn+4	"	14.0	"
				282	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	A 1 to Cn+4	"	"	"
				283	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn+4	"	"	"
284	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn+4	"	"	"				
285	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn+4	"	"	"				
286	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn+4	"	"	"				
287	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn+4	"	"	"				
288	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn+4	"	"	"				

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit		
				16	17	18	19	20	21	22	23	24	27	28	Min		Max				
9	t_{PHL1}	3003 Fig. 4	Case 3 J	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{cc}	A 0 to G	2.5	10.0	ns		
			Test no.																		
Tc = 25°C			257													A 1 to G					
			258														A 2 to G				
			259														A 3 to G				
			260														B 0 to G				
			261														B 1 to G				
			262														B 2 to G				
			263														B 3 to G				
			264														A 0 to G	3.0	9.0		
			265														A 1 to G				
			266														A 2 to G				
			267														A 3 to G				
			268														B 0 to G				
			269														B 1 to G				
			270														B 2 to G				
			271														B 3 to G				
			272														A 0 to G				
			273							OUT							A 0 to Cn+4	5.0	13.0		
			274														A 1 to Cn+4				
			275														A 2 to Cn+4				
			276														A 3 to Cn+4				
277														B 0 to Cn+4							
278														B 1 to Cn+4							
279														B 2 to Cn+4							
280														B 3 to Cn+4							
281														A 0 to Cn+4				14.0			
282														A 1 to Cn+4							
283														A 2 to Cn+4							
284														A 3 to Cn+4							
285														B 0 to Cn+4							
286														B 1 to Cn+4							
287														B 2 to Cn+4							
288														B 3 to Cn+4							

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 I/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit			
				B 0	A 0	S3	S2	S1	S0	Ch	M	F 0	F 1	F 2	Min		Max					
9 Tc = 25°C	t _{PHL13}	3003 Fig. 4	289	0.0 V	IN	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	0.0 V					GND	2.5	9.5	ns			
			290	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			291	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			292	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			293	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			294	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			295	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			296	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			297	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			298	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			299	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			300	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			301	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			302	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			303	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			304	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
305	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.5	13.5	"			
306	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
307	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
308	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
309	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
310	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
311	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
312	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
313	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.0	27.0	"			
314	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
316	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
317	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
318	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
319	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
320	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
10	Same tests and terminal conditions as for subgroup 9, except T _c = +125°C and use limits from table I.																					
11	Same tests and terminal conditions as for subgroup 9, except T _c = -55°C and use limits from table I.																					

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit	
				16	17	18	19	Ch+4	G	B 3	A 3	B 2	A 2	B 1	27		28	Min		Max
9 Tc = 25°C	t_{PHL3}	3003 Fig. 4	Test no.	F 3	A = B	P	OUT		B 3	A 3	B 2	A 2	B 1	A 1		A 0 to P	2.5	9.5	ns	
			289														A 1 to P	"	"	"
			290														A 2 to P	"	"	"
			291														A 3 to P	"	"	"
			292														B 0 to P	"	"	"
			293														B 1 to P	"	"	"
			294														B 2 to P	"	"	"
			295														B 3 to P	"	"	"
			296														A 0 to P	"	8.0	"
			297														A 1 to P	"	"	"
			298														A 2 to P	"	"	"
			299														A 3 to P	"	"	"
300														B 0 to P	"	"	"			
301														B 1 to P	"	"	"			
302														B 2 to P	"	"	"			
303														B 3 to P	"	"	"			
304														A 0 to A = B	5.5	13.5	"			
305														A 1 to A = B	"	"	"			
306														A 2 to A = B	"	"	"			
307														A 3 to A = B	"	"	"			
308														B 0 to A = B	"	"	"			
309														B 1 to A = B	"	"	"			
310														B 2 to A = B	"	"	"			
311														B 3 to A = B	"	"	"			
312														A 0 to A = B	11.0	27.0	"			
313														A 1 to A = B	"	"	"			
314														A 2 to A = B	"	"	"			
315														A 3 to A = B	"	"	"			
316														B 0 to A = B	"	"	"			
317														B 1 to A = B	"	"	"			
318														B 2 to A = B	"	"	"			
319														B 3 to A = B	"	"	"			
320														A 0 to A = B	"	"	"			
10	Same tests and terminal conditions as for subgroup 9, except Tc = +125°C and use limits from table I.																			
11	Same tests and terminal conditions as for subgroup 9, except Tc = -55°C and use limits from table I.																			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

- 1/ For cases 3 pins not referenced are N/C.
2/ I_{IL} limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I_{IL1}	58	-0.25/-0.60	-0.03/-0.60	-0.25/-0.60
I_{IL2}	59-66	-0.75/-1.8	-0.09/-1.8	-0.75/-1.8
I_{IL3}	67-70	-1.0/-2.4	-0.12/-2.4	-1.0/-2.4
I_{IL4}	71	-1.25/-3.0	-0.15/-3.0	-1.25/-3.0

- 3/ $H \geq 1.5$ V, $L \leq 1.5$ V; A = 2.5 V, B = 0.5 V.
4/ Perform function sequence at $V_{CC} = 4.5$ V and repeat at $V_{CC} = 5.5$ V.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 1/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit			
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		Min	Max				
1 Tc = 25°C	V _{OH}	3006	1	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	V _{cc}	P	2.5		V			
				2	2.0V	0.8V	2.0V	2.0V	2.0V	0.8V	-1.0 mA							2.0V	0.8V	2.0V	4.5V	Cn + z				
				3	0.8V	2.0V	0.8V				2.0V							2.0V	0.8V	0.8V		G				
				4	0.8V	2.0V	2.0V												0.8V	2.0V	2.0V		Cn + y			
				5	2.0V	2.0V	0.8V												0.8V	2.0V	2.0V		Cn + x			
				6	2.0V	0.8V	2.0V	0.8V	2.0V	0.8V	2.0V	2.0V	20 mA						-1.0 mA	2.0V	0.8V		P		0.5	
				7	0.8V	0.8V	0.8V	0.8V	2.0V	0.8V	2.0V	2.0V	2.0V			20 mA					2.0V		Cn + z			
				8	2.0V	2.0V	2.0V	2.0V	0.8V	2.0V	2.0V	0.8V					20 mA						G			
				9				0.8V	2.0V	0.8V	2.0V							20 mA					Cn + y			
				10				2.0V	2.0V	2.0V	2.0V								20 mA				Cn + x			
				11				-18 mA															G 1		-1.2	
	V _{OL}	3007	12		-18 mA															P 1						
				13			-18 mA															G 0				
				14				-18 mA														P 0				
				15																		G 3				
				16								-18 mA											P 3			
				17															-18 mA				Cn			
				18																-18 mA			G 2			
				19																			P 2			
				20				2.7V	0.0V	0.0V	0.0V	0.0V	0.0V							0.0V	0.0V	5.5V	G 1		20	μA
				21				0.0V	2.7V	0.0V													P 1			
					I _{HH1}	3010	22	0.0V	0.0V	2.7V														G 0		
23			0.0V					2.7V														P 0				
24								0.0V	2.7V													G 3				
25									0.0V	2.7V												P 3				
26												0.0V											Cn			
27																				2.7V	2.7V	G 2				
28																				0.0V	0.0V	P 2				
29								7.0V															G 1		100	
30								0.0V	7.0V														P 1			
31									0.0V	7.0V													G 0			
	I _{HH2}	3009	32							0.0V	7.0V													P 0		
				33				0.0V	7.0V													G 3				
				34						0.0V	7.0V											P 3				
				35							0.0V											Cn				
				36																		G 2				
				37																		P 2				
				38				5.5V	5.5V	5.5V	5.5V	5.5V	5.5V										Cn		2/	mA

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 Case 2 1/ Test no.	Cases E, F	Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).																Measured terminal	Limits		Unit							
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		Min	Max								
1 Tc = 25°C	I _{IL2} I _{IL3} I _{IL4} I _{IL5} I _{IL6} I _{OS} I _{OP}	3009	39	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	V _{CC}	P 3	2/	2/	mA							
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"					
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
2	I _{OH} I _{OL}	3005	58	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	V _{CC}	P 3	2/	2/	mA							
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
3	I _{OH} I _{OL}	3005	58	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	V _{CC}	P 3	2/	2/	mA							
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
7 Tc = 25°C	Functional test 3/	3014	59	B	B	B	B	B	B	B	L	GND	H	L	H	H	H	B	B	B	B	B	B	All outputs						
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
8 Tc = 25°C	t _{PHL1} t _{PH1}	3004 Fig. 4	74	B	B	B	B	B	B	B	L	GND	H	L	H	H	H	B	B	B	B	B	B	Cn to Cn + x						
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"				
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
				"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 1/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Limits		Unit					
				Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.		Case 2 1/ Test no.	Case 2 1/ Test no.	Case 2 1/ Test no.	Min	Max
9	t_{PH2}	3004 Fig. 4	80	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	0.0 V	5.0 V	1.0	5.0	ns				
			81	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"		
			82	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	
			83	"	"	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	
			84	"	"	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	
			85	"	"	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	
			86	"	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	
			87	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	
			88	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"
			89	"	"	IN	"	"	0.0 V	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"
			90	"	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"
			91	"	"	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"
			92	"	"	2.7 V	0.0 V	IN	0.0 V	0.0 V	0.0 V	0.0 V	"	"	"	"	OUT	OUT	0.0 V	2.7 V	0.0 V	"	1.0	5.2	"	"	
			93	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"
			94	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"
			95	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	OUT	OUT	2.7 V	"	"	"	"	"	"	"	"
			96	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"
97	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"			
98	"	"	IN	"	"	2.7 V	0.0 V	"	"	"	"	"	OUT	OUT	0.0 V	"	"	"	"	"	"	"	"	"			
99	"	"	"	2.7 V	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"			
100	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"			
101	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"			
102	"	"	"	"	0.0 V	"	2.7 V	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"			
103	"	"	"	"	"	"	2.7 V	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"			
104	"	"	2.7 V	"	"	"	0.0 V	"	"	"	"	"	"	"	0.0 V	IN	"	"	"	"	"	"	"	"			
105	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"			
106	"	"	"	"	2.7 V	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
107	"	"	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"			

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit				
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		Min	Max					
9 T _C = 25°C	t _{PH3}	3004 Fig. 4	108	G 1 2.7 V	P 1 0.0 V	G 0 IN	P 0 0.0 V	G 3 0.0 V	P 3 0.0 V	GND	GND	Cn + z	G	Cn + y	OUT	Cn + x	Cn	G 2 2.7 V	P 2 0.0 V	V _{CC} 5.0	G 0 to Cn + x	2.5	8.5	ns			
			109	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	G 0 to Cn + y	"	"	"		
			110	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	G 0 to Cn + z	"	"	"	"	
			111	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	OUT	2.7 V	"	"	"	G 0 to Cn + x	"	"	"	"
			112	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	G 0 to Cn + y	"	"	"	"
			113	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	G 0 to Cn + z	"	"	"	"
			114	"	IN	"	2.7 V	0.0 V	"	"	"	"	"	"	"	"	OUT	"	0.0 V	"	"	"	G 1 to Cn + y	"	"	"	"
			115	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	2.7 V	"	"	"	G 1 to Cn + z	"	"	"	"
			116	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	G 1 to Cn + y	"	"	"	"
			117	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	G 1 to Cn + z	"	"	"	"
			118	"	"	"	"	0.0 V	"	2.7 V	"	"	"	"	"	"	OUT	"	"	"	"	"	G 1 to Cn + y	"	"	"	"
			119	"	"	"	"	"	"	2.7 V	"	"	"	"	OUT	"	"	"	"	"	"	"	G 1 to Cn + z	"	"	"	"
			120	"	2.7 V	"	"	"	"	0.0 V	"	"	"	"	"	"	"	"	0.0 V	IN	"	"	G 2 to Cn + z	"	"	"	"
			121	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	2.7 V	"	"	"	G 2 to Cn + z	"	"	"	"
			122	"	"	"	"	2.7 V	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	G 2 to Cn + z	"	"	"	"
			123	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	G 2 to Cn + z	"	"	"	"
			124	"	"	IN	0.0 V	"	"	2.7 V	"	"	"	"	"	OUT	"	"	"	0.0 V	2.7 V	"	P 1 to G	"	8.0	"	"
			125	"	"	"	"	0.0 V	"	2.7 V	"	"	"	"	"	"	"	"	"	"	IN	"	P 2 to G	"	"	"	"
			126	"	"	0.0 V	"	0.0 V	"	0.0 V	"	IN	"	"	"	"	"	"	"	"	0.0 V	"	P 3 to G	"	"	"	"
127	"	"	2.7 V	IN	"	"	0.0 V	"	0.0 V	"	"	"	"	"	"	"	"	0.0 V	"	P 1 to G	"	10.0	"	"			
128	"	"	2.7 V	0.0 V	"	"	2.7 V	"	0.0 V	"	"	"	"	"	"	"	"	IN	"	P 2 to G	"	"	"	"			
129	"	"	0.0 V	"	"	"	0.0 V	"	IN	"	"	"	"	"	"	"	"	0.0 V	"	P 3 to G	"	"	"	"			
130	"	"	2.7 V	"	"	IN	"	"	0.0 V	"	"	"	"	"	"	"	2.7 V	"	"	G 0 to G	"	7.5	"	"			
131	"	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	G 1 to G	"	"	"	"			
132	"	"	IN	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	G 1 to G	"	"	"	"			
133	"	"	2.7 V	0.0 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	G 2 to G	"	"	"	"			
134	"	"	"	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	G 2 to G	"	"	"	"			
135	"	"	"	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	G 2 to G	"	"	"	"			
136	"	"	"	0.0 V	2.7 V	"	"	IN	"	"	"	"	"	"	"	"	2.7 V	0.0 V	"	G 3 to G	"	"	"	"			
137	"	"	"	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	0.0 V	"	G 3 to G	"	"	"	"			
138	"	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	G 3 to G	"	"	"	"			
139	"	"	"	0.0 V	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	0.0 V	"	G 3 to G	"	"	"	"			

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit			
				G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn+z	G	Cn+y	Cn+x	Cn	G 2	P 2	V _{cc}		Min	Max				
9	t_{PLH5}	3004 Fig. 4	140	2.7V	IN	2.7V	0.0V	2.7V	0.0V	0.0V	GND	GND	Cn+z	OUT			2.7V	0.0V	5.0V	G 0 to G	3.0	10.5	ns			
			141	IN	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V	0.0V										G 1 to G	"	"	"		
			142	IN	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V	0.0V										G 1 to G	"	"	"		
			143	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V								IN			G 2 to G	"	"	"	
			144	"	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V										G 2 to G	"	"	"	
			145	"	0.0V	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V								2.7V		G 2 to G	"	"	"	
			146	"	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V								0.0V		G 3 to G	"	"	"	
			147	"	2.7V	0.0V	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V								0.0V		G 3 to G	"	"	"	
			148	"	0.0V	0.0V	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V								2.7V		G 3 to G	"	"	"	
			149	"	0.0V	0.0V	0.0V	2.7V	0.0V	2.7V	0.0V	2.7V								0.0V		G 3 to G	"	"	"	
			150	t_{PHL6}	"	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	OUT							0.0V		P 0 to P	1.5	5.5	"	
			151	"	"	IN	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V										P 1 to P	"	"	"	
			152	"	"	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V									IN		P 2 to P	"	"	"
			153	"	"	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V									0.0V		P 3 to P	"	"	"
			154	t_{PLH6}	"	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V											P 0 to P	2.5	7.5	"
155	"	"	IN	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V											P 1 to P	"	"	"			
156	"	"	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V										IN		P 2 to P	"	"	"		
157	"	"	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	0.0V	IN								0.0V		P 3 to P	"	"	"			
10	Same tests, terminal conditions, and limits as for subgroup 9, except T _c = +125°C and use limits from table I.																									
11	Same tests, terminal conditions and limits as for subgroup 9, except T _c = -55°C and use limits from table I.																									

1/ For case 2 pins not referenced are NC.
2/ I_L limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B
I _{L1}	38	-0.5/-1.2	-0.5/-1.2
I _{L2}	39	-1.0/-2.4	-0.1/-2.4
I _{L3}	40	-1.5/-3.6	-1.5/-3.6
I _{L4}	41 - 43	-2.0/-4.8	-1.5/-3.6
I _{L5}	44 - 45	-3.5/-8.4	-3.5/-8.4
I _{L6}	46	-4.0/-9.6	-4.0/-9.6

3/ H ≥ 1.5 V, L ≤ 1.5 V; A = 2.5 V, B = 0.5 V.
4/ Perform function sequence at V_{cc} = 4.5 V and repeat at V_{cc} = 5.5 V.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test.no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max			
1	V _{OH}	3006	1	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V	-1 mA		GND						0.8 V	0.8 V	0.8 V	0.8 V	4.5 V	F0	2.5		V		
			2	"	"	"	"	"	"	"	"	-1 mA								"	"	"	"	"	F1	"		"	
			3	"	"	"	"	"	"	"	"	"								"	"	"	"	"	F2	"		"	
			4	"	"	"	"	"	"	"	"	"								"	"	"	"	"	F3	"		"	
			5	"	"	"	"	"	"	"	"	"								"	"	"	"	"	G	"		"	
			6	"	2.0 V	"	2.0 V	"	2.0 V	"	2.0 V	"	2.0 V	"							2.0 V	2.0 V	"	2.0 V	"	P	"		"
			7	"	"	"	"	"	2.0 V	2.0 V	0.8 V	-1 mA									0.8 V	"	"	"	"	F0	"		"
			8	"	"	"	"	"	"	"	"	"	-1 mA								"	"	"	"	"	F1	"		"
			9	"	"	"	"	"	"	"	"	"	"								"	"	"	"	"	F2	"		"
			10	"	"	"	"	"	"	"	"	"	"								"	"	"	"	"	F3	"		"
			11	"	"	"	"	"	"	"	"	"	"								"	"	"	"	"	G	"		"
			12	"	"	0.8 V	"	0.8 V	"	0.8 V	"	0.8 V	"	2.0 V							2.0 V	0.8 V	"	0.8 V	"	P	"		"
			13	"	2.0 V	2.0 V	2.0 V	"	2.0 V	"	0.8 V	"	0.8 V	-1 mA							2.0 V	2.0 V	2.0 V	2.0 V	"	F0	"		"
			14	"	"	"	"	"	"	"	"	"	"	-1 mA							"	"	"	"	"	F1	"		"
			15	"	"	"	"	"	"	"	"	"	"	"							"	"	"	"	"	F2	"		"
			16	"	"	"	"	"	"	"	"	"	"	"							"	"	"	"	"	F3	"		"
			17	"	"	"	"	"	"	"	"	"	"	"							"	"	"	"	"	G	"		"
V _{OL}	3007	18	0.8 V	2.0 V	0.8 V	2.0 V	0.8 V	2.0 V	0.8 V	2.0 V	20 mA								0.8 V	2.0 V	0.8 V	2.0 V	0.8 V	F0	0.5		"		
		19	"	"	"	"	"	"	"	"	"	20 mA							"	"	"	"	"	F1	"		"		
		20	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	F2	"		"		
		21	"	"	"	"	"	"	"	"	"	"	20 mA							"	"	"	"	"	F3	"		"	
		22	2.0 V	0.8 V	2.0 V	0.8 V	"	"	"	"	"	"	"							0.8 V	2.0 V	0.8 V	2.0 V	"	G	"		"	
		23	"	"	"	"	"	"	"	"	"	"	"							0.8 V	"	"	0.8 V	"	P	"		"	
		24	"	2.0 V	"	2.0 V	"	2.0 V	"	0.8 V	2.0 V	20 mA								2.0 V	2.0 V	"	2.0 V	"	F0	"		"	
		25	"	"	"	"	"	"	"	"	"	"	20 mA							"	"	"	"	"	F1	"		"	
		26	"	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	F2	"		"	
		27	"	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	F3	"		"	
		28	"	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	G	"		"	
		29	"	"	"	"	"	"	"	"	"	"	"							"	"	"	"	"	P	"		"	
		30	0.8 V	0.8 V	0.8 V	0.8 V	"	2.0 V	"	2.0 V	"	2.0 V	"	20 mA						0.8 V	0.8 V	0.8 V	0.8 V	"	F0	"		"	
		31	"	"	"	"	"	"	"	"	"	"	20 mA							"	"	"	"	"	F1	"		"	
		32	"	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	F2	"		"	
		33	"	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	F3	"		"	
		34	"	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	G	"		"	
35	"	"	"	"	"	"	"	"	"	"	"	20 mA						"	"	"	"	"	P	"		"			
V _{IC}	3009	36	-18 mA	"	"	"	"	"	"	"	"	"							"	"	"	"	"	P	"		"		
		37	"	-18 mA	"	"	"	"	"	"	"	"	"						"	"	"	"	"	A1	-1.2		"		
		38	"	"	-18 mA	"	"	"	"	"	"	"	"						"	"	"	"	"	B1	"		"		
		39	"	"	"	-18 mA	"	"	"	"	"	"	"						"	"	"	"	"	A0	"		"		
		40	"	"	"	"	-18 mA	"	"	"	"	"	"						"	"	"	"	"	B0	"		"		
		41	"	"	"	"	"	-18 mA	"	"	"	"	"						"	"	"	"	"	S0	"		"		
		42	"	"	"	"	"	-18 mA	"	"	"	"	"						"	"	"	"	"	S1	"		"		
		43	"	"	"	"	"	"	-18 mA	"	"	"	"						"	"	"	"	"	S2	"		"		
		44	"	"	"	"	"	"	"	"	"	"	"						"	"	"	"	"	Cn	"		"		
		45	"	"	"	"	"	"	"	"	"	"	"						"	"	"	"	"	B3	"		"		
		46	"	"	"	"	"	"	"	"	"	"	"						"	"	"	"	"	A3	"		"		
		47	"	"	"	"	"	"	"	"	"	"	"						"	"	"	"	"	B2	"		"		
		48	"	"	"	"	"	"	"	"	"	"	"						"	"	"	"	"	A2	"		"		
		49	"	"	"	"	"	"	"	"	"	"	"						"	"	"	"	"	S0	1/	1/	1/	mA	
		50	"	"	"	"	"	"	"	"	"	"	"						"	"	"	"	"	S1	"		"		
																				"	"	"	"	"	S2	"		"	

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open)																				Measured terminal	Test limits		Unit	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		Min	Max		
1	I_{L2}	3009	51	0.5 V																			A1	1/	1/	mA		
			52		0.5 V																				B1			"
			53			0.5 V																			A0			"
			54				0.5 V																		B0			"
			55																						Cn			"
			56																						B3			"
			57																						A3			"
			58																						B2			"
			59																						A2			"
			60	3010		60	2.7 V																		A1			20
			61			61		2.7 V																	B1			"
			62			62			2.7 V																A0			"
			63			63				2.7 V															B0			"
			64			64					2.7 V														S0			"
			65			65						2.7 V													S1			"
			66			66							2.7 V												S2			"
			67			67								2.7 V											Cn			"
			68			68									2.7 V										B3			"
			69			69										2.7 V									A3			"
70			70											2.7 V								B2			"			
71			71												2.7 V							A2			"			
72			72	7.0 V																		A1			100			
73			73		7.0 V																	B1			"			
74			74			7.0 V																A0			"			
75			75				7.0 V															B0			"			
76			76					7.0 V														S0			"			
77			77						7.0 V													S1			"			
78			78							7.0 V												S2			"			
79			79								7.0 V											Cn			"			
80			80									7.0 V										B3			"			
81			81										7.0 V									A3			"			
82			82											7.0 V								B2			"			
83			83												7.0 V							A2			"			
84			84	GND	GND	GND	GND	4.5 V	GND	0.0 V												A2			"			
85			85								0.0 V											F0			-150			
86			86									0.0 V										F1			"			
87			87										0.0 V									F2			"			
88			88											0.0 V								F3			"			
89			89		4.5 V		4.5 V	GND		4.5 V					0.0 V							G			"			
90			90		GND		GND		4.5 V		2.5 V					0.0 V						P			"			
91			91																			F0			60			
92			92																			F1			"			
93			93																			F2			"			
94			94																			F3			"			
95			95																			G			"			
96			96	4.5 V	4.5 V	4.5 V	4.5 V	GND	GND	GND												P			"			
97			97																			V _{CC}			89			
2			Same tests, terminal conditions, and limits as subgroup 1, except T _c = +125°C and V _{IC} tests are omitted.																									
3			Same tests, terminal conditions, and limits as subgroup 1, except T _c = -55°C and V _{IC} tests are omitted.																									
7	Functional tests 2/	3014	98	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	3/		
			99	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	"		
			100	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	"		
			101	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	"		
			102	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	"		
			103	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	"		
			104	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	"		

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit					
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max						
7	Functional tests 2/	3014	105	A	A	A	A	A	B	B	L	L	L	GND	F2	L	H	L	A	A	A	A	A	All outputs								
			106	B	B	B	B	B	A	"	A	"	H	H	"	H	H	"	B	B	B	B	B	"								
			107	B	A	B	A	"	"	"	"	"	L	L	"	"	"	"	H	"	A	B	A	B	"							
			108	A	B	A	B	"	"	"	"	"	L	L	"	"	"	"	L	"	B	A	B	A	"							
			109	A	A	A	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	A	A	A	"							
			110	B	B	B	B	"	"	"	"	"	L	L	"	"	"	"	L	"	A	B	B	B	"							
			111	B	A	B	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	B	A	B	"							
			112	A	B	A	B	"	"	"	"	"	L	L	"	"	"	"	L	"	B	A	B	A	"							
			113	A	A	A	A	"	"	"	"	"	L	L	"	"	"	"	L	"	A	A	A	A	"							
			114	B	B	B	B	A	"	"	"	"	L	L	"	"	"	"	L	"	B	B	B	B	"							
			115	B	A	B	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	B	A	B	"							
			116	A	B	A	B	"	"	"	"	"	H	H	"	"	"	"	"	"	B	A	B	A	"							
			117	A	A	A	A	"	"	"	"	"	L	L	"	"	"	"	L	"	A	A	A	A	"							
			118	B	B	B	B	"	"	"	"	"	H	H	"	"	"	"	H	"	A	B	B	B	"							
			119	B	A	B	A	"	"	"	"	"	L	L	"	"	"	"	L	"	A	B	A	B	"							
			120	A	B	A	B	"	"	"	"	"	L	L	"	"	"	"	"	"	B	A	B	A	"							
			121	A	A	A	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	A	A	A	"							
122	B	B	B	B	A	"	"	"	"	L	L	"	"	"	"	L	"	B	B	B	B	"										
123	B	A	B	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	B	A	B	"										
124	A	B	A	B	"	"	"	"	"	H	H	"	"	"	"	H	"	B	A	B	A	"										
125	A	A	A	A	"	"	"	"	"	L	L	"	"	"	"	L	"	A	A	A	A	"										
126	B	B	B	B	A	"	"	"	"	L	L	"	"	"	"	L	"	B	B	B	B	"										
127	B	A	B	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	B	A	B	"										
128	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"										
129	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	A	A	A	A	"										
130	B	B	B	B	A	"	"	"	"	L	L	"	"	"	"	L	"	B	B	B	B	"										
131	B	A	B	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	B	A	B	"										
132	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	L	"	B	A	B	A	"										
133	A	A	A	A	"	"	"	"	"	H	H	"	"	"	"	H	"	A	A	A	A	"										
134	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	B	B	B	B	"										
135	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	B	"										
136	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"										
137	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	L	"	A	A	A	A	"									
8	Same tests, terminal conditions, and limits as for subgroup 7, except T _c = +125°C and T _c = -55°C.	3003 Fig. 4	138	GND	GND	GND	GND	2.7 V	GND	GND	GND	GND	GND	GND	GND			IN	GND	GND	GND	GND	5.0 V	Cn to F0	2.5	12	ns					
			139	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	"			
			140	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	"		
			141	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	"	
			142	"	"	"	"	"	"	GND	2.7 V	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"	"	
			143	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	"	
			144	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	"	
			145	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	"	
			146	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	2.7 V	"	"	"	Cn to F0	"	"	"	"
			147	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	"
			148	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	"
			149	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	"
			150	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	GND	"	GND	"	"	"	Cn to F0	"	8	"	"
			151	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	"
152	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	"			
153	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	"			
154	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"	"			
155	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	"			
156	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	"			
157	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	"			
158	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	2.7 V	"	2.7 V	"	"	"	"	Cn to F0	"	"	"	"		
159	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	"		
160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	"		
161	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	"		

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit			
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max				
9 Tc = 25°C	t _{PH2}	3003 Fig. 4	162	IN	2.7 V	IN	2.7 V	2.7 V	GND	OUT	OUT	OUT	GND	OUT	OUT	OUT	2.7 V	2.7 V	2.7 V	IN	2.7 V	2.7 V	A0 to F0 A1 to F1	3.0	15	ns				
			163	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			164	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			165	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			166	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			167	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			168	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			169	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			170	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			171	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			172	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			173	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			174	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			175	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			176	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			177	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			178	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
179	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
180	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
181	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
182	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
183	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
184	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
185	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
186	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
187	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
188	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
189	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
190	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
191	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
192	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
193	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
194	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
195	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
196	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
197	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
198	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
199	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
200	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
201	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
202	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
203	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
204	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
205	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
206	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
207	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
208	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
209	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
210	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
211	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
212	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
213	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
214	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
215	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
216	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
217	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit					
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max						
9	t _{PHL3}	3003 Fig. 4	218	2.7 V	IN	2.7 V	IN	2.7 V	GND	GND	OUT	OUT	GND	F2				GND		2.7 V			2.7 V	5.0 V	B0 to F0	3.0	12.5	ns				
			219																							B1 to F1						
			220													OUT											B2 to F2					
			221														OUT										B3 to F3					
			222																								B0 to F0					
			223																									B1 to F1				
			224																									B2 to F2				
			225																									B3 to F3				
			226																									B0 to F0				
			227																									B1 to F1				
			228																									B2 to F2				
			229																										B3 to F3			
			230																										B0 to F0			
			231																										B1 to F1			
			232																										B2 to F2			
			233																										B3 to F3			
			234																										B0 to F0			
			235																										B1 to F1			
			236																										B2 to F2			
			237																										B3 to F3			
			238																										B0 to F0			
			239																										B1 to F1			
			240																										B2 to F2			
			241																										B3 to F3			
			242																										B0 to F0			
			243																										B1 to F1			
244																										B2 to F2						
245																										B3 to F3						
246																										B0 to F0						
247																										B1 to F1						
248																										B2 to F2						
249																										B3 to F3						
250																										B0 to F0						
251																										B1 to F1						
252																										B2 to F2						
253																										B3 to F3						
254																										B0 to F0						
255																										B1 to F1						
256																										B2 to F2						
257																										B3 to F3						
258																										B0 to F0						
259																										B1 to F1						
260																										B2 to F2						
261																										B3 to F3						
262																										B0 to F0						
263																										B1 to F1						
264																										B2 to F2						
265																										B3 to F3						
266																										A0 to G						
267																										A1 to G						
268																										A2 to G						
269																										A3 to G						

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit														
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	\bar{G}	\bar{P}	Cn	B3	A3	B2	A2	V _{cc}		Min	Max															
9 T _c = 25°C	t _{PUH8}	3003 Fig. 4	338	2.7 V	2.7 V	2.7 V	IN	2.7 V	GND	GND							OUT	2.7 V	2.7 V	2.7 V	2.7 V	2.7 V	5.0 V	B0 to \bar{P}	2.0	11.0	ns														
			339	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to \bar{P}	"	"	"	"												
			340	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to \bar{P}	"	"	"	"	"											
			341	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	B3 to \bar{P}	"	"	"	"	"										
			342	GND	GND	GND	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	GND	GND	GND	GND	"	B0 to \bar{P}	"	"	"	"	"										
			343	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to \bar{P}	"	"	"	"	"	"									
			344	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to \bar{P}	"	"	"	"	"	"	"								
			345	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	B3 to \bar{P}	"	"	"	"	"	"	"							
			346	"	2.7 V	"	"	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	2.7 V	"	"	B0 to \bar{P}	"	"	"	"	"	"	"							
			347	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	B1 to \bar{P}	"	"	"	"	"	"	"							
			348	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	B2 to \bar{P}	"	"	"	"	"	"	"	"						
			349	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	B3 to \bar{P}	"	"	"	"	"	"	"	"						
			350	2.7 V	"	2.7 V	"	2.7 V	IN	IN	"	GND	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	2.7 V	"	B0 to \bar{P}	3.0	9.5	"	"	"	"	"							
			351	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to \bar{P}	"	"	"	"	"	"	"	"						
			352	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	B2 to \bar{P}	"	"	"	"	"	"	"	"	"					
			353	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	B3 to \bar{P}	"	"	"	"	"	"	"	"	"					
			354	GND	GND	GND	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	GND	GND	GND	GND	"	B0 to \bar{P}	"	"	"	"	"	"	"	"	"					
			355	"	IN	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to \bar{P}	"	"	"	"	"	"	"	"	"					
			356	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	B2 to \bar{P}	"	"	"	"	"	"	"	"	"	"				
			357	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	B3 to \bar{P}	"	"	"	"	"	"	"	"	"	"				
			358	"	2.7 V	"	"	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	B0 to \bar{P}	"	"	"	"	"	"	"	"	"	"	"			
			359	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	B1 to \bar{P}	"	"	"	"	"	"	"	"	"	"	"			
			360	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	B2 to \bar{P}	"	"	"	"	"	"	"	"	"	"	"	"		
			361	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	B3 to \bar{P}	"	"	"	"	"	"	"	"	"	"	"	"		
			362	2.7 V	"	2.7 V	"	2.7 V	2.7 V	2.7 V	IN	2.7 V	GND	"	"	"	"	"	OUT	"	"	GND	2.7 V	2.7 V	2.7 V	"	S0 to \bar{G}	"	15.0	"	"	"	"	"	"	"	"				
			363	2.7 V	"	2.7 V	"	2.7 V	"	"	2.7 V	IN	GND	"	"	"	"	"	"	"	"	"	"	2.7 V	"	2.7 V	"	S1 to \bar{G}	"	"	"	"	"	"	"	"	"	"			
			364	GND	"	GND	"	GND	"	"	2.7 V	GND	IN	"	"	"	"	"	"	"	"	2.7 V	"	GND	"	GND	"	S2 to \bar{G}	"	"	"	"	"	"	"	"	"	"	"		
			365	2.7 V	"	2.7 V	"	2.7 V	"	"	IN	2.7 V	GND	"	"	"	"	"	"	"	"	"	"	2.7 V	"	2.7 V	"	S0 to \bar{G}	"	13.5	"	"	"	"	"	"	"	"	"		
			366	2.7 V	"	2.7 V	"	2.7 V	"	"	2.7 V	IN	GND	"	"	"	"	"	"	"	"	"	"	2.7 V	"	2.7 V	"	S1 to \bar{G}	"	"	"	"	"	"	"	"	"	"	"	"	
			367	GND	"	GND	"	GND	"	"	2.7 V	GND	IN	"	"	"	"	"	"	"	"	2.7 V	"	GND	"	GND	"	S2 to \bar{G}	"	"	"	"	"	"	"	"	"	"	"	"	
			368	GND	"	GND	"	GND	"	"	IN	2.7 V	GND	"	"	"	"	"	"	OUT	"	"	"	GND	"	GND	"	S0 to \bar{P}	"	"	"	"	"	"	"	"	"	"	"	"	
			369	2.7 V	GND	2.7 V	GND	2.7 V	IN	GND	2.7 V	IN	GND	"	"	"	"	"	"	"	"	"	"	2.7 V	GND	2.7 V	"	S1 to \bar{P}	"	"	"	"	"	"	"	"	"	"	"	"	
			370	GND	GND	GND	GND	GND	2.7 V	GND	2.7 V	GND	IN	"	"	"	"	"	"	"	"	"	"	GND	"	GND	"	S2 to \bar{P}	"	"	"	"	"	"	"	"	"	"	"	"	"

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit	
				A1	B1	A0	B0	S0	S1	S2	F0	F1	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}	Min		Max			
9	I _{PHL10}	3003 Fig. 4	371	GND	2.7 V	GND	2.7 V	IN	2.7 V	GND	GND	GND	GND	GND	GND	GND	OUT	GND	2.7 V	GND	2.7 V	GND	5.0 V	S0 to P	3.0	13.5	ns	
			372	GND	2.7 V	GND	2.7 V	IN	2.7 V	GND	GND	GND	GND	GND	GND	GND	GND	*	GND	2.7 V	GND	2.7 V	*	S1 to P	*	*	*	*
			373	GND	GND	GND	GND	2.7 V	GND	IN	GND	IN	GND	GND	GND	GND	GND	*	*	GND	GND	GND	GND	*	S2 to P	*	*	*
10	Same tests as subgroup 9, except T _c = +125°C and use limits from table I.																											
11	Same tests as subgroup 10, except T _c = -55°C and use limits from table I.																											

1/ I_L limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I _{L1}	48 - 50		-0.12/-0.6	-0.12/-0.6
I _{L2}	51 - 59		-0.12/-2.4	-0.12/-2.4

2/ H ≥ 1.5 V, L ≤ 1.5 V; A = 2.5 V, B = 0.5 V.

3/ Perform function sequence at V_{cc} = 4.5 V and repeat at V_{cc} = 5.5 V.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD- method	Cases R, S, 2 Test.no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal All outputs	Test limits		Unit							
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{CC} 3/		Min	Max								
7 Tc = 25°C	Func- tional tests 2/	3014	117	A	A	A	A	A	A	B	H	H	GND	H	H	H	L	L	B	A	A	B	A	All										
			118	A	A	A	A	A	A	A	A	B	H	H	GND	H	H	L	L	B	A	A	B	A	All									
			119	B	B	B	B	B	B	B	B	B	H	H	L	L	L	L	L	A	B	B	B	B	B	All								
			120	B	B	B	B	B	B	B	B	B	H	H	L	L	L	L	L	A	B	B	B	B	B	All								
			121	A	A	A	A	A	A	A	A	A	L	L	L	L	L	L	L	A	B	B	B	B	B	All								
			122	A	A	A	A	A	A	A	A	A	L	L	L	L	L	L	L	A	B	B	B	B	B	All								
			123	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All								
			124	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All								
			125	A	B	A	B	A	B	A	B	A	B	H	H	L	L	L	L	A	B	B	B	B	B	All								
			126	A	A	A	A	A	A	A	A	A	B	H	H	L	L	L	L	A	B	B	B	B	B	All								
			127	B	B	B	B	B	B	B	B	B	B	H	H	L	L	L	L	A	B	B	B	B	B	All								
			128	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All								
			129	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All								
			130	A	B	A	B	A	B	A	B	A	B	H	H	L	L	L	L	A	B	B	B	B	B	All								
			131	A	A	A	A	A	A	A	A	A	A	L	L	L	L	L	L	A	B	B	B	B	B	All								
			132	A	A	A	A	A	A	A	A	A	A	L	L	L	L	L	L	A	B	B	B	B	B	All								
			133	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All								
			134	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All								
135	A	B	A	B	A	B	A	B	A	B	H	H	L	L	L	L	A	B	B	B	B	B	All											
136	A	A	A	A	A	A	A	A	A	A	H	H	L	L	L	L	A	B	B	B	B	B	All											
137	A	A	A	A	A	A	A	A	A	A	H	H	L	L	L	L	A	B	B	B	B	B	All											
138	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All											
139	B	B	B	B	B	B	B	B	B	A	L	L	L	L	L	L	B	B	B	B	B	B	All											
140	A	B	A	B	A	B	A	B	A	B	L	L	L	L	L	L	A	B	B	B	B	B	All											
141	A	A	A	A	A	A	A	A	A	A	L	L	L	L	L	L	A	B	B	B	B	B	All											
142	A	A	A	A	A	A	A	A	A	A	L	L	L	L	L	L	A	B	B	B	B	B	All											
8 Same tests, terminal conditions, and limits as for subgroup 7, except Tc = +125°C and Tc = -55°C.	t _{PH1}	3003 Fig. 4	143	GND	GND	GND	GND	2.7 V	GND	GND	OUT	OUT	GND					IN	GND	GND	GND	GND	Cn to F0	Cn to F0	3	12	ns							
			144	"	"	"	"	"	"	"	"	OUT	OUT	GND					"	"	"	"	"	Cn to F1	Cn to F1	"	"	"						
			145	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	Cn to F2	Cn to F2	"	"	"					
			146	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	Cn to F3	"	"	"				
			147	"	"	"	"	"	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	Cn to F0	"	"	"				
			148	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	Cn to F1	"	"	"			
			149	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	Cn to F2	"	"	"			
			150	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	Cn to F3	"	"	"		
			151	"	"	"	"	"	"	2.7 V	2.7 V	"	OUT	OUT	"	"	"	"	"	"	2.7 V	"	"	"	"	"	Cn to F0	Cn to F0	"	"	"			
			152	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	Cn to F1	"	"	"		
			153	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	Cn to F2	"	"	"	
			154	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	Cn to F3	"	"	"
			155	"	"	"	"	"	"	GND	"	GND	"	OUT	OUT	"	"	"	"	"	"	GND	"	"	"	"	"	Cn to F0	Cn to F0	2.5	8	"		
			156	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
157	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
158	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
159	"	"	"	"	"	"	"	"	GND	2.7 V	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
160	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
161	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
162	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
163	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
164	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
165	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
166	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2	Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open)																Test limits		Unit																						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		19	20	Measured terminal	Min	Max																	
9	t_{PH2}	3003 Fig. 4	167	A1	2.7 V	B1	IN	A0	IN	B0	2.7 V	S0	GND	S1	GND	S2	GND	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	2.7 V	B3	2.7 V	A3	2.7 V	B2	2.7 V	A2	2.7 V	A2	5.0 V	A0 to F0	4	15	ns
			168	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			169	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			170	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			171	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			172	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			173	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			174	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			175	A1	IN	B1	IN	A0	IN	B0	IN	S0	2.7 V	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	2.7 V	B3	2.7 V	A3	2.7 V	B2	2.7 V	A2	2.7 V	A2	2.7 V	A0 to F0	4	15	ns
			176	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			177	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			178	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			179	A1	IN	B1	IN	A0	IN	B0	IN	S0	GND	IN	S1	GND	IN	S2	2.7 V	OUT	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	GND	B3	GND	A3	GND	B2	GND	A2	GND	A2	GND	A0 to F0	4	15	ns
			180	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			181	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			182	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			183	A1	IN	B1	IN	A0	IN	B0	IN	S0	2.7 V	IN	S1	2.7 V	IN	S2	GND	OUT	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	2.7 V	B3	2.7 V	A3	2.7 V	B2	2.7 V	A2	2.7 V	A2	2.7 V	A0 to F0	3.5	12.5	ns
			184	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			185	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			186	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
			187	A1	IN	B1	IN	A0	IN	B0	IN	S0	GND	IN	S1	2.7 V	IN	S2	IN	OUT	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	GND	B3	GND	A3	GND	B2	GND	A2	GND	A2	GND	A0 to F0	4	15	ns
			188	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns
189	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
190	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
191	A1	IN	B1	IN	A0	IN	B0	IN	S0	2.7 V	IN	S1	2.7 V	IN	S2	IN	OUT	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	2.7 V	B3	2.7 V	A3	2.7 V	B2	2.7 V	A2	2.7 V	A2	2.7 V	A0 to F0	4	15	ns			
192	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
193	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
194	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
195	A1	IN	B1	IN	A0	IN	B0	IN	S0	GND	IN	S1	GND	IN	S2	2.7 V	OUT	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	GND	B3	GND	A3	GND	B2	GND	A2	GND	A2	GND	A0 to F0	4	15	ns			
196	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
197	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
198	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
199	A1	2.7 V	B1	IN	A0	2.7 V	IN	B0	IN	S0	2.7 V	GND	IN	S1	GND	IN	OUT	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
200	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
201	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
202	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
203	A1	IN	B1	IN	A0	IN	B0	IN	S0	IN	S1	IN	S2	IN	F0	OUT	F1	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	IN	B3	IN	A3	IN	B2	IN	A2	IN	A2	IN	A1 to F1	4	15	ns			
204	A1	IN	B1	IN	A0	IN	B0	IN	S0	GND	IN	S1	2.7 V	IN	S2	IN	OUT	OUT	GND	F2	OUT	F3	OUT	OVR	Cn + 4	Cn	2.7 V	B3	2.7 V	A3	2.7 V	B2												

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit					
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{cc}		B0 to F0	Min		Max				
9 Tc = 25°C	t _{PHL3}	3003 Fig. 4	223	2.7 V	IN	2.7 V	IN	2.7 V	GND	GND	OUT	OUT	GND	GND							2.7 V	2.7 V	5.0 V	B0 to F0	3.5	12.5	ns					
			224	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
			225	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			226	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	"	"		
			227	"	"	"	IN	GND	2.7 V	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"		
			228	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			229	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			230	"	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	
			231	"	"	"	"	"	IN	2.7 V	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			232	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			233	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			234	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			235	"	"	"	"	"	"	IN	GND	GND	2.7 V	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			236	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			237	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			238	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			239	"	"	"	"	"	"	IN	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			240	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			241	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			242	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			243	"	"	"	"	"	"	IN	GND	2.7 V	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			244	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			245	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			246	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			247	"	"	"	"	"	"	GND	IN	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			248	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			249	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
251	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
252	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
253	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
254	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
255	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
256	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
257	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
258	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
259	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
260	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
261	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
262	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
263	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
264	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
265	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
266	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
267	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
268	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
269	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
270	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
271	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
272	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
273	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
274	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
275	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
276	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
277	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
278	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
279	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
280	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
281	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
282	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD- method	Cases R, S, 2	Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).																Test limits		Unit						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		19	20	Min	Max		
9	t_{PH5}	3003 Fig. 4	283	A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{cc}	5	12.5	ns		
			284	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	2.7 V	"	"	"	
			285	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			286	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			287	"	2.7 V	IN	2.7 V	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"
			288	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			289	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			290	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			291	"	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			292	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			293	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			294	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			295	"	"	GND	"	"	"	IN	GND	GND	"	"	"	"	"	"	"	GND	GND	2.7 V	"	"	"	6	15.5	"
			296	"	"	IN	"	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			297	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			298	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			299	"	"	2.7 V	"	"	"	IN	2.7 V	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"
			300	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			301	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			302	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			303	"	"	"	"	"	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			304	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			305	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			306	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			307	"	"	IN	"	"	"	IN	GND	GND	"	"	"	"	"	"	"	GND	GND	2.7 V	"	"	"	"	"	"
			308	"	"	IN	"	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			309	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			310	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			311	"	"	"	"	"	"	IN	2.7 V	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"
			312	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			313	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			314	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			315	"	"	"	"	"	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			316	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
317	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
318	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
319	"	"	GND	GND	IN	GND	"	"	GND	GND	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"			
320	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
321	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
322	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
323	"	"	2.7 V	2.7 V	IN	2.7 V	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
324	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
325	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
326	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
327	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
328	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
329	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
330	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
331	"	"	"	"	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
332	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
333	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
334	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
335	"	"	2.7 V	2.7 V	IN	2.7 V	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
336	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
337	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
338	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
339	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
340	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
341	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
342	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

1/ I_{IL} limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I_{IL1}	48 - 50		-0.12/-0.6	
I_{IL2}	51 - 59		-0.12/-2.4	

2/ $H \geq 1.5$ V, $L \leq 1.5$ V; A = 2.5 V, B = 0.5 V.

3/ Perform function sequence at $V_{CC} = 4.5$ V and repeat at $V_{CC} = 5.5$ V.

5. PACKAGING

5.1 Packaging requirements. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Service or Defense Agency, or within the military service's system command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

6.1 Intended use. Microcircuits conforming to this specification are intended for original equipment design applications and logistic support of existing equipment.

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number, and date of the specification.

- b. PIN and compliance identifier, if applicable (see 1.2).
- c. Requirements for delivery of one copy of the conformance inspection data pertinent to the device inspection lot to be supplied with each shipment by the device manufacturer, if applicable.
- d. Requirements for certificate of compliance, if applicable.
- e. Requirements for notification of change of product or process to contracting activity in addition to notification to the qualifying activity, if applicable.
- f. Requirements for failure analysis (including required test condition of method 5003 of MIL-STD-883), corrective action, and reporting of results, if applicable.
- g. Requirements for product assurance options.
- h. Requirements for special carriers, lead lengths, or lead forming, if applicable. These requirements should not affect the part number. Unless otherwise specified, these requirements will not apply to direct purchase by or direct shipment to the Government.
- i. Requirements for "JAN" marking.
- j. Packaging requirements (see 5.1).

6.3 Superseding information. The requirements of MIL-M-38510 have been superseded to take advantage of the available Qualified Manufacturer Listing (QML) system provided by MIL-PRF-38535. Previous references to MIL-M-38510 in this document have been replaced by appropriate references to MIL-PRF-38535. All technical requirements now consist of this specification and MIL-PRF-38535. The MIL-M-38510 specification sheet number and PIN have been retained to avoid adversely impacting existing government logistics systems and contractor's parts lists.

6.4 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Manufacturers List QML-38535 whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or purchase orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from DSCC-VQ, 3990 E. Broad Street, Columbus, Ohio 43123-1199.

6.5 Abbreviations, symbols, and definitions. The abbreviations, symbols, and definitions used herein are defined in MIL-PRF-38535, MIL-HDBK-1331, and as follows:

GND Ground zero voltage potential
 I_{IN} Current flowing into an input terminal
 V_{IN} Voltage level at an input terminal

6.6 Logistic support. Lead materials and finishes (see 3.4) are interchangeable. Unless otherwise specified, microcircuits acquired for Government logistic support will be acquired to device class B (see 1.2.2), lead material and finish A (see 3.4). Longer length leads and lead forming should not affect the part number.

6.7 Substitutability. The cross-reference information below is presented for the convenience of users. Microcircuits covered by this specification will functionally replace the listed generic-industry type. Generic-industry microcircuit types may not have equivalent operational performance characteristics across military temperature ranges or reliability factors equivalent to MIL-M-35810 device types and may have slight physical variations in relation to case size. The presence of this information should not be deemed as permitting substitution of generic-industry types for MIL-M-38510 types or as a waiver of any of the provisions of MIL-PRF-38535.

Military device type	Generic-industry type
01	54F181
02	54F182
03	54F381
04	54F382

6.8 Manufacturers' designation. Manufacturers' circuits which form a part of this specification are designated with an "X" as shown in table IV herein.

TABLE IV. Manufacturers' designations.

Device type	Manufacturer's designation		
	Circuit A	Circuit B	Circuit C
	National Semiconductor/ Fairchild Semiconductor	Motorola Inc.	Signetics Corp.
01	X	X	X
02	X	X	
03		X	X
04		X	

6.9 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5962-2014)

Review activities:
Army - MI, SM
Navy - AS, CG, MC, SH, TD
Air Force - 03, 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at www.dodssp.daps.mil.

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[QS4A201QG](#) [HCS301T-ISN](#) [HCS500-I/SM](#) [MC74HC151ADTG](#) [TC4066BP\(N,F\)](#) [74ACT11139PWR](#) [HMC728LC3CTR](#) [74VHC238FT\(BJ\)](#)
[74VHC4066AFT\(BJ\)](#) [74VHCT138AFT\(BJ\)](#)