INCH-POUND
MIL-M-38510/116A
4 February 2004
SUPERSEDING
MIL-M-38510/116
16 April 1980

MILITARY SPECIFICATION

MICROCIRCUITS, LINEAR, CMOS, ANALOG SWITCH WITH DRIVER, MONOLITHIC SILICON

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

Reactivated for new design as of 4 February 2004. May be used for either new or existing design acquisition.

The requirement 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 silicon, CMOS, monolithic, analog switches with drivers. Two product assurance classes and a choice of case outlines and lead finishes are provided 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 For this product, the requirements of MIL-M-38510 have been superseded by MIL-PRF-38535, (see 6.3)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:

Device type	Circuit
01	Two-channel, SPST switch, TTL input compatible
02	One-channel, SPDT switch, TTL input compatible
03	Two-channel, DPST switches, TTL input compatible
04	Two-channel, SPDT switch, TTL input compatible
05	Two-channel, SPST switch, CMOS input compatible
06	One-channel, SPDT switch, CMOS input compatible
07	Two-channel, DPST switch, CMOS input compatible
08	Two-channel, SPDT switches, CMOS input compatible

NOTE: A channel is defined as a driver with associated switches.

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

1.2.3 Case outline. The case outlines are as designated in MIL-STD-1835 and as follows:

Outline letter	Descriptive designator	Terminals	Package style
C	GDIP1-T14 or CDIP2-T14	14	Dual-in-line
D	GDFP1-F14 or CDFP2-F14	14	Flat pack
I	MACY1-X10	10	Can

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 email bipolar@dscc.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.

V_{IN} to ground	$V^+ + 18$, $V^+ - 36$ V dc
$+V_{CC}$ to $-V_{CC}$	44 V dc
$+V_{CC}$ to ground	+36 V dc
V_S or V_D	$+V_{CC}$, $-V_{CC}$
Current (any terminal)	30 mA
Pulsed 1 ms, 10% duty cycle (S or D only)	100 mA
Storage temperature	-65°C to +150°C
Lead temperature (soldering, 60 seconds)	+300°C
Junction temperature	T_J = +175°C

1.4 Recommended operating conditions.

$+V_{CC}$	+15 V dc
$-V_{CC}$	- 15 V dc
GND	0 V dc
Ambient operating temeperature range (T_A)	-55°C ≤ T_A ≤ +125°C

1.5 Power and thermal characteristics.

Case outline	Maximum allowable power dissipation	Maximum θ_{JC}	Maximum θ_{JA}
C	400 mW @ T_A = 125°C	35°C/W	120°C/W
D	350 mW @ T_A = 125°C	60°C/W	140°C/W
I	350 mW @ T_A = 125°C	40°C/W	140°C/W

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.

2.1.1 Specifications, standards, and handbooks. 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.

2.2 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 shall take 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 Circuit diagram and terminal connections. The circuit diagram and terminal connections shall be as specified on figure 3.

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

3.3.4 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 ambient operating temperature range, unless otherwise specified.

3.5.1 Switch operation. The analog switches are guaranteed to turn “on” with either a “low” input ($V_{IL} \leq 0.8$ V for the 01 –04 devices and $V_{IL} \leq 3.5$ V for the 05 –08 devices) or “high” input ($V_{IH} \geq 4$ V for the 01 – 04 devices and $V_{IH} \geq 11$ V for the 05 – 08 devices) as specified below.

Device type	V_{IN}	Switch ON	Switch OFF
01, 05	V_{IL}	----	1,2
	V_{IH}	1, 2	----
02, 06	V_{IL}	2	1
	V_{IH}	1	2
03, 07	V_{IL}	----	1,2,3,4
	V_{IH}	1,2,3,4	----
04, 08	V_{IL}	3,4	1,2
	V_{IH}	1,2	3,4

3.6 Electrical test requirements. 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 82 (see MIL-PRF-38535, appendix A).

TABLE I. Electrical performance characteristics.

Characteristic	Symbol	Conditions V_{CC} = ±15 V, GND = 0 V Unless otherwise specified	Temperature range	Device type	Limits		Unit
					Min	Max	
Drain-source ON resistance	R_{DS}	V_D = -10 V, I_S = 10 mA, See figure 4	T_A = -55°C, 25°C	All		50	Ω 1/
			T_A = 125°C			75	
		V_D = 10 V, I_S = -10 mA, See figure 4	T_A = -55°C, 25°C	All		50	
			T_A = 125°C			75	
		V_D = -7.5 V, V_{CC} = ±10 V, I_S = 10 mA, See figure 4	T_A = -55°C, 25°C	All		70	
			T_A = 125°C			100	
		V_{CC} = ±10 V, V_D = 7.5 V, I_S = -10 mA, See figure 4	T_A = -55°C, 25°C	All		70	
			T_A = 125°C			100	
Channel ON leakage current	$I_{D(ON)}$	V_S = V_D = 14 V, (V_{IN} – see 3.5.1), See figure 5	T_A = -55°C, 125°C	All	-100	100	nA
			T_A = 25°C		-1	+1	
		V_S = V_D = -14 V, (V_{IN} – see 3.5.1), See figure 5	T_A = -55°C, 125°C	All	-200	200	
			T_A = 25°C		-2	+2	
Drain OFF leakage current	$I_{D(OFF)}$	V_D = 14 V, V_S = -14 V, (V_{IN} – see 3.5.1), See figure 8	T_A = -55°C, 125°C	All	-100	100	nA
			T_A = 25°C		-1	+1	
		V_D = -14 V, V_S = 14 V, (V_{IN} – see 3.5.1), See figure 8	T_A = -55°C, 125°C	All	-100	100	
			T_A = 25°C		-1	+1	
Source OFF leakage current	$I_{S(OFF)}$	V_D = 14 V, V_S = -14 V, (V_{IN} – see 3.5.1), See figure 9	T_A = -55°C, 125°C	All	-100	100	nA
			T_A = 25°C		-1	+1	
		V_D = -14 V, V_S = 14 V, (V_{IN} – see 3.5.1), See figure 9	T_A = -55°C, 125°C	All	-100	100	
			T_A = 25°C		-1	+1	
Input current input voltage low	I_{IL}	V_{IN} = 0 V, See figure 7	-55°C ≤ T_A ≤ 125°C	All	-1		µA
Input current input voltage high	I_{IH}	V_{IN} = 5 V, See figure 7	-55°C ≤ T_A ≤ 125°C	01,02, 03,04	-1		µA
		V_{IN} = 15 V, See figure 7	-55°C ≤ T_A ≤ 125°C	All		1	

See footnotes at end of table.

TABLE I. Electrical performance characteristics – Continued.

Test	Symbol	Conditions V_{CC} = ±15 V, GND = 0 V Unless otherwise specified	Temperature range	Device type	Limits		Unit
					Min	Max	
Positive supply current	$+I_{CC}$	V_{IN} = 0.8 V, See figure 6	T_A = -55°C, 25°C	01,02, 03,04		0.01	mA
			T_A = 125°C			0.1	
		V_{IN} = 4 V, See figure 6	T_A = -55°C	01,03, 04		2.0 2/	
			T_A = 125°C, 25°C			1.0 3/	
		V_{IN} = 0 V, See figure 6	T_A = -55°C, 25°C	05,06, 07,08		0.01	
			T_A = 125°C			0.1	
		V_{IN} = 15 V, See figure 6	T_A = -55°C, 25°C	05,06, 07,08		0.01	
			T_A = 125°C			0.1	
Negative supply current	$-I_{CC}$	V_{IN} = 0.8 V, See figure 6	T_A = -55°C, 25°C	01,02, 03,04	-0.01		mA
			T_A = 125°C		-0.1		
		V_{IN} = 4 V, See figure 6	T_A = -55°C, 25°C	01,02, 03,04	-0.01		
			T_A = 125°C		-0.1		
		V_{IN} = 0 V, See figure 6	T_A = -55°C, 25°C	05,06, 07,08	-0.01		
			T_A = 125°C		-0.1		
		V_{IN} = 15 V, See figure 6	T_A = -55°C, 25°C	05,06, 07,08	-0.01		
			T_A = 125°C		-0.1		
Time to turn ON	t_{ON}	See figure 10	T_A = -55°C	01,02, 03,04		260	ns
				05,06, 07,08		225	
			T_A = 25°C	01,02, 03,04		300	
				05,06, 07,08		250	
			T_A = 125°C	01,02, 03,04		360	
				05,06, 07,08		290	

See footnotes at end of table.

TABLE I. Electrical performance characteristics – Continued.

Test	Symbol	Conditions V_{CC} = ±15 V, GND = 0 V Unless otherwise specified	Temperature range	Device type	Limits		Unit
Time to turn OFF	t_{OFF}	See figure 10	T_A = -55°C	01,02, 03,04		230	ns
				05,06, 07,08		140	
			T_A = 25°C	01,02, 03,04		250	
				05,06, 07,08		150	
			T_A = 125°C	01,02, 03,04		290	
				05,06, 07,08		160	
Single channel isolation	V_{ISO}	f = 1 MHz , V_{GEN} = 1 V_{P-P}, See figure 11	T_A = 25°C	All	50		dB
Crosstalk between channels	V_{CT}	f = 1 MHz , V_{GEN} = 1 V_{P-P}, See figure 12	T_A = 25°C	All	50		dB
Charge transfer error	V_{CTE}	V_S = GND, See figure 13	T_A = 25°C	All		15	mV
Break-before-make time delay	t_D	See figure 14	-55°C ≤ T_A ≤ 125°C	02,04, 06,08	5		ns
Driver input capacitance	C_{C1}	V_{IN} = 0 V	T_A = 25°C	All		15	pF
	C_{C2}	V_{IN} = 15 V				10	
Switch input capacitance	C_{IS}		T_A = 25°C	All		30	pF
Switch output capacitance	C_{OS}		T_A = 25°C	All		30	pF

1/ The listed resistance limits correspond to the following voltage values:
9.5 V, -9.5 V → 50 Ω 6.8 V, -6.8 V → 70 Ω
9.25 V, -9.25 V → 75 Ω 6.5 V, -6.5 V → 100 Ω
2/ $+I_{CC}$ = 1.0 mA max for device type 02 only.
3/ $+I_{CC}$ = 0.5 mA max for device type 02 only.

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, 9	1*, 2, 3, 9
Group A test requirements	1,2,3,(4,7)**, 9,10,11, (12,13)***	1,2,3,(4,7)**, 9,10,11, (12,13)***
Group B electrical test parameters when using the method 5005 QCI option	1,2,3 and table IV delta limits	N/A
Group C end-point electrical parameters	1,2,3 and table IV delta limits	1 and table IV delta limits
Additional electrical subgroups for group C periodic inspections	N/A	(4, 7)****
Group D end-point electrical parameters	1,2,3	1
Additional electrical subgroups for group D periodic inspections	(4,7)*****	None

*PDA applies to subgroup 1.
** See 4.4.1e
*** See 4.4.1c
**** See 4.4.3c
***** See 4.4.4b

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 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. Reverse bias burn-in (method 1015 of MIL-STD-883). This screen shall apply to class S only. However, regardless of device class, for devices 02, 04, 06, and 08, an additional burn-in shall be performed with the logic level of the switch drivers opposite that used in the first burn-in. Ambient temperature (T_A) shall be 125°C minimum. Duration for reverse bias test shall be 24 hours minimum for class S devices, and duration for additional burn-in (class B devices) shall be 160 hours minimum.

c. 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.

d. For class S devices, post dynamic burn-in, or class B devices, post static burn-in, electrical parameter measurements may, at the manufacturer's option, be performed separately or included in the final electrical parameter measurements.

e. 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 5, 6, and 8 shall be omitted.

c. Subgroups 12 and 13 shall be added to group A inspection as specified in table III herein. For subgroup 12, device groups (01, 02, 05, 06) and (03, 04, 07, 08) may be qualified by passing qualification tests on the first device type from each group that is submitted to qualification. Subgroup 12 shall be performed using a sample of 5 devices with no failures allowed. The sample size series number for subgroup 13 shall be 10 for all classes.

d. C_X measurements shall be made only for initial qualification and after process or design changes which may affect capacitance measurements. Capacitance shall be measured between the designated terminal and ground at the frequency of 1 MHz. (See method 3012 of MIL-STD-883). C_{IS} and C_{OS} tests will be measured with the switch off (see 3.5.1).

e. Subgroups 4 and 7 shall be performed for initial qualification only using a sample of 5 devices for each device type submitted to group A inspection, with no failure allowed. If not more than 1 failure is found in the first sample of 5, a second sample of 5 is permitted with no further failures allowed.

4.4.2 Group B inspection. Group B inspection shall be in accordance with table II of MIL-PRF-38535. When using the method 5005 option for class S for device types 02, 04, 06, and 08, life test duration shall be divided equally between forward bias and reverse bias.

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. For class S devices, for device types 02, 04, 06, and 08, life test duration shall be divided equally between forward bias and reverse bias.

c. A special subgroup shall be added to group C inspection for class B devices only, and it shall consist of the group A subgroups 4 and 7 as specified in table III herein. This special subgroup shall be performed on each device type that is qualified from those listed in 1.2.1 herein. After initial qualification, the special subgroup shall be performed periodically on a single device type selected from those device types previously qualified. A sample of 5 devices (of the device type to be inspected) shall be chosen and submitted to test with no failures allowed. If not more than 1 failure is found in the first sample of 5, a second sample of 5 is permitted with no further failures allowed. When more than one device type is qualified, the single device type selected shall be different device type for each subsequent periodic inspection until all qualified device types have been inspected. The sequence of single device types shall be repeated to fulfill the periodic inspection requirement.

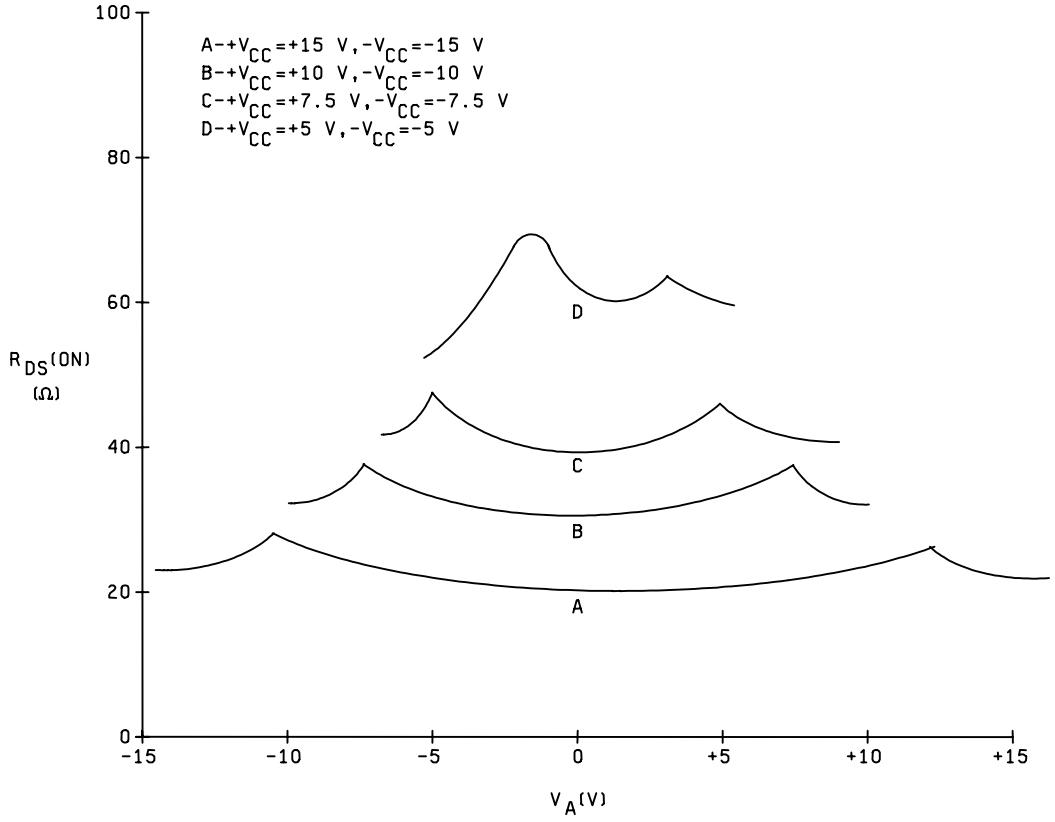


Figure 1. $R_{DS(ON)}$ versus V_A and power supply voltage.

(For reference only.)

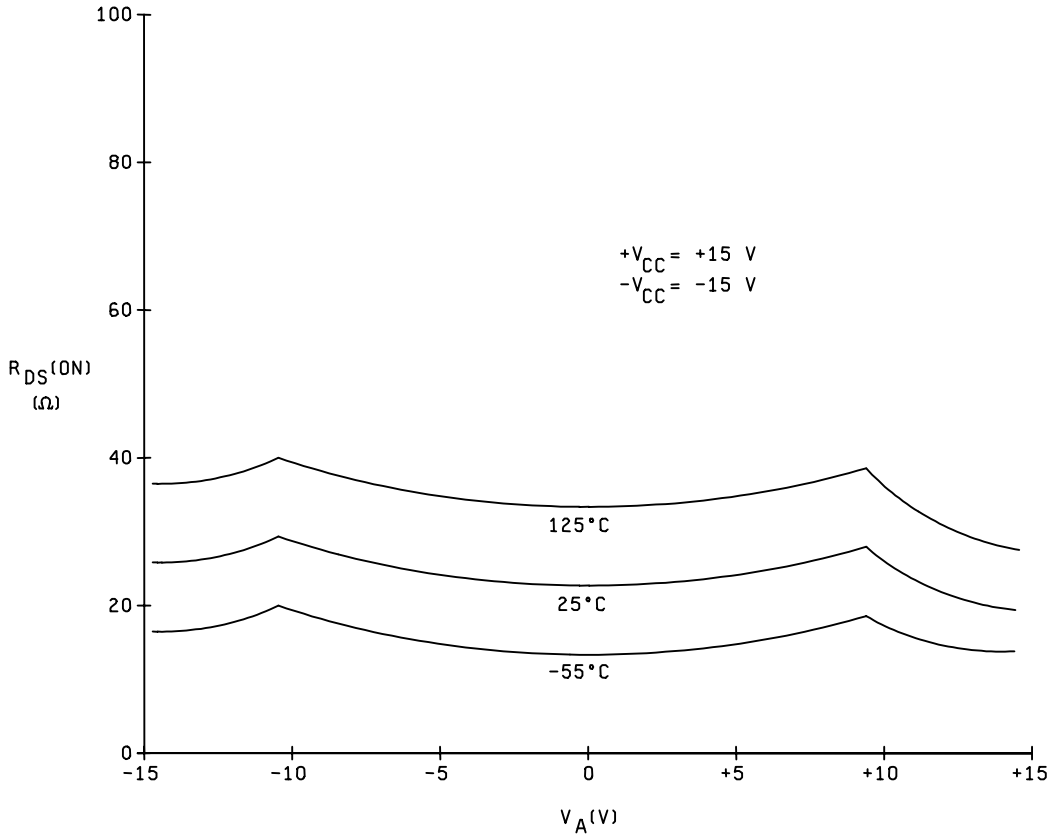
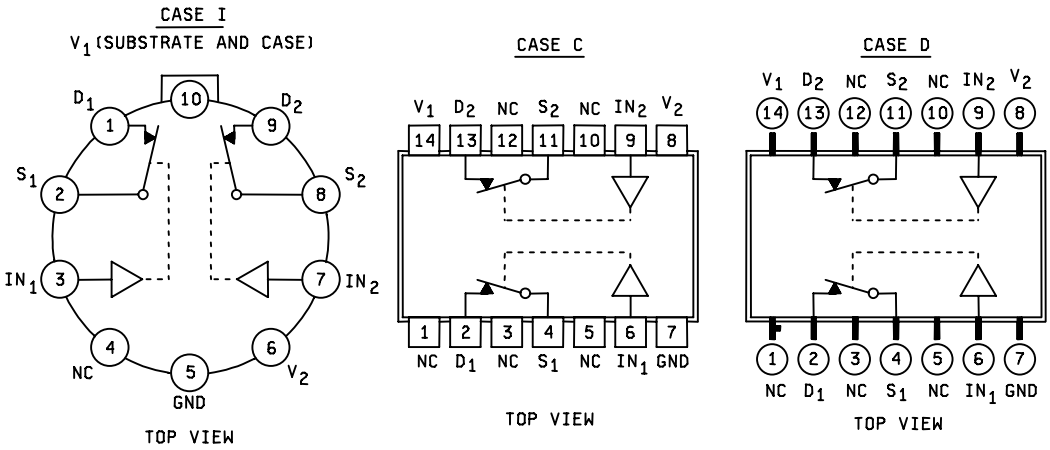


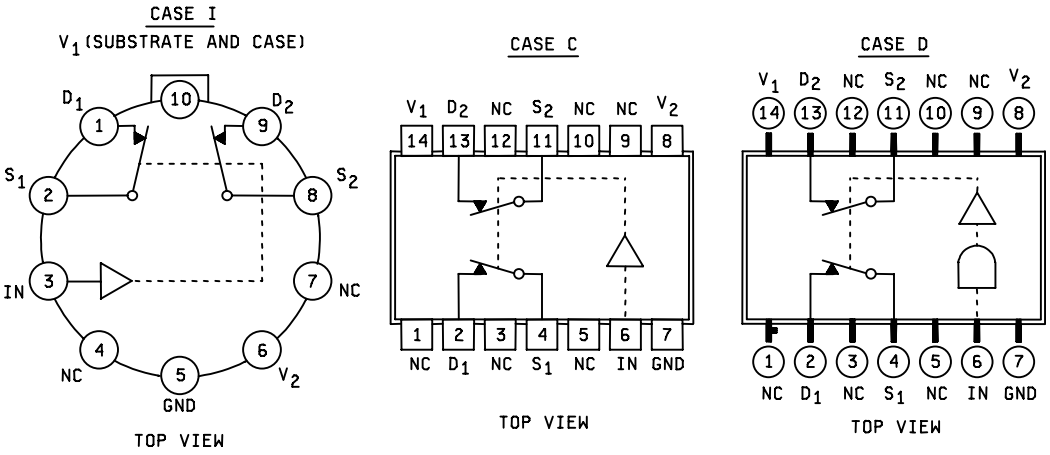
Figure 2. $R_{DS(ON)}$ versus V_A and temperature.

(For reference only.)

Device types 01 and 05



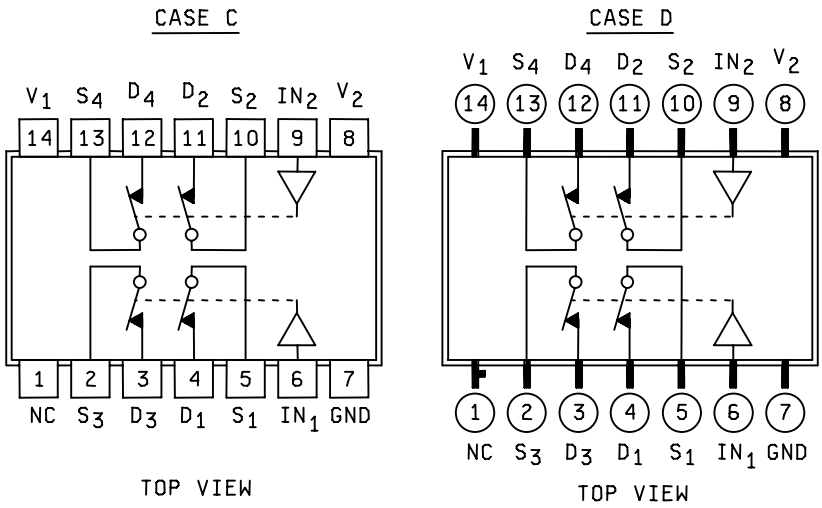
Device types 02 and 06



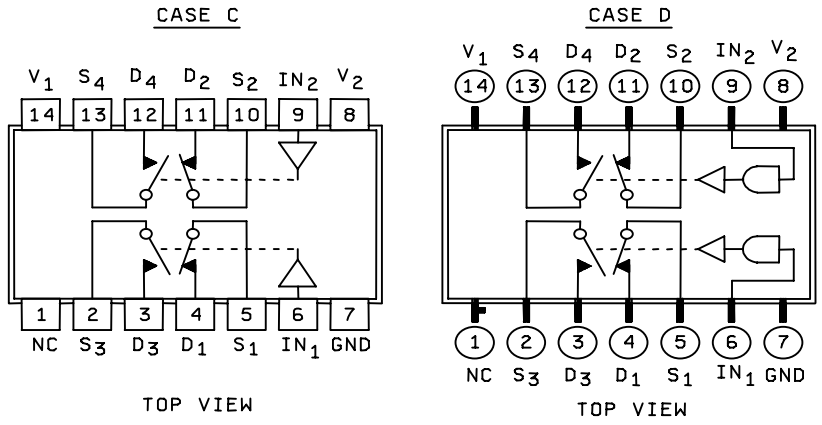
Switch states are for logic “1” input
(Positive logic)

Figure 3. Terminal connections – Continued.

Device types 03 and 07

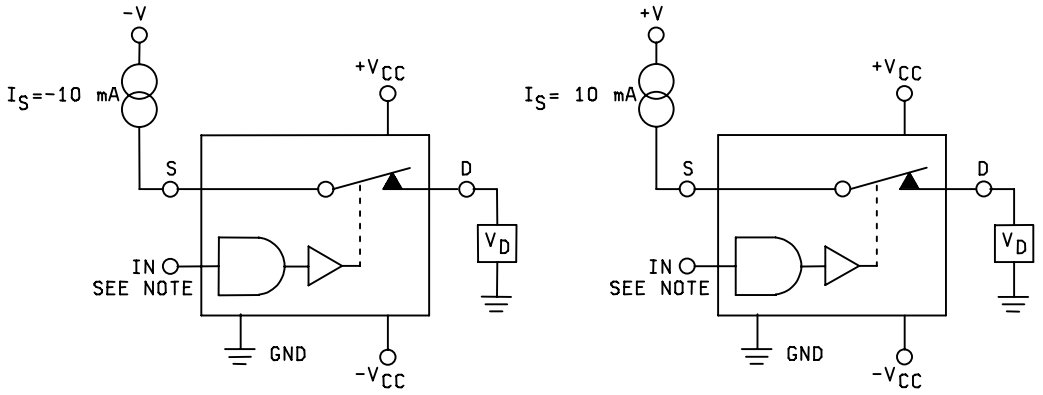


Device types 04 and 08



Switch states are for logic “1” input
(Positive logic)

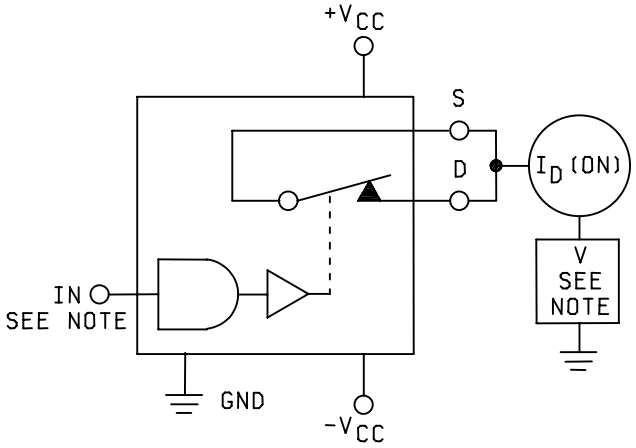
Figure 3. Terminal connections – Continued.



NOTE: V_{IN} from table I
$R_{DS} = (V_S - V_D)/(-10\ mA)$

NOTE: V_{IN} from table I
$R_{DS} = (V_S - V_D)/(10\ mA)$

Figure 4. R_{DS} test circuits.



NOTE: Conditions are from table I.

Figure 5. $I_{D(ON)}$ test circuit.

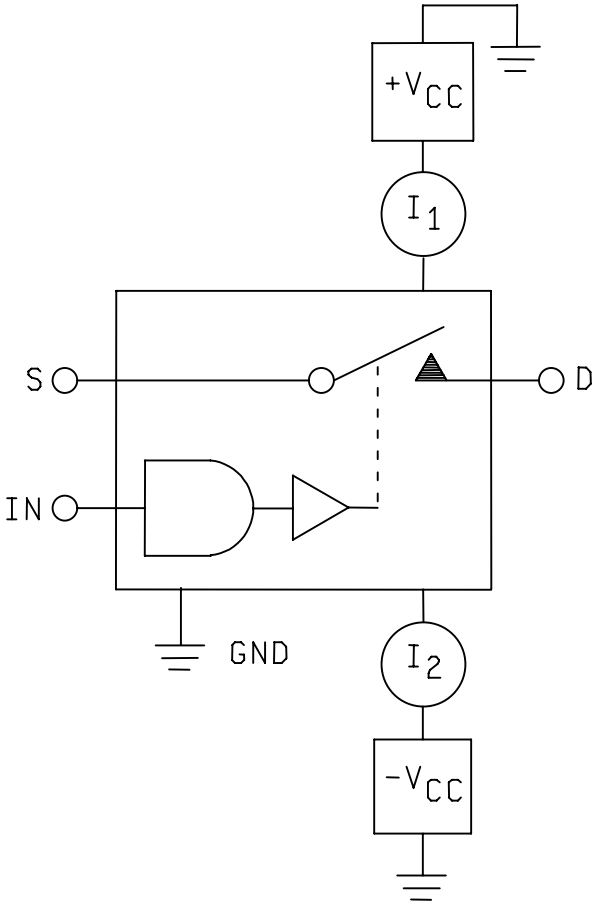
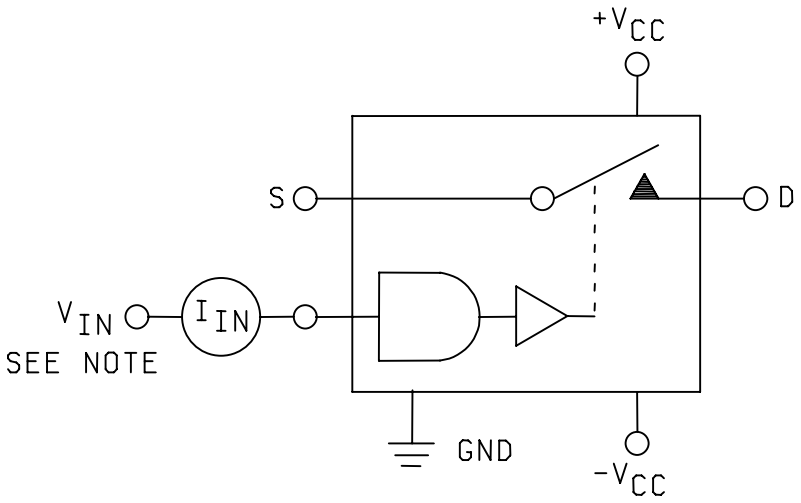
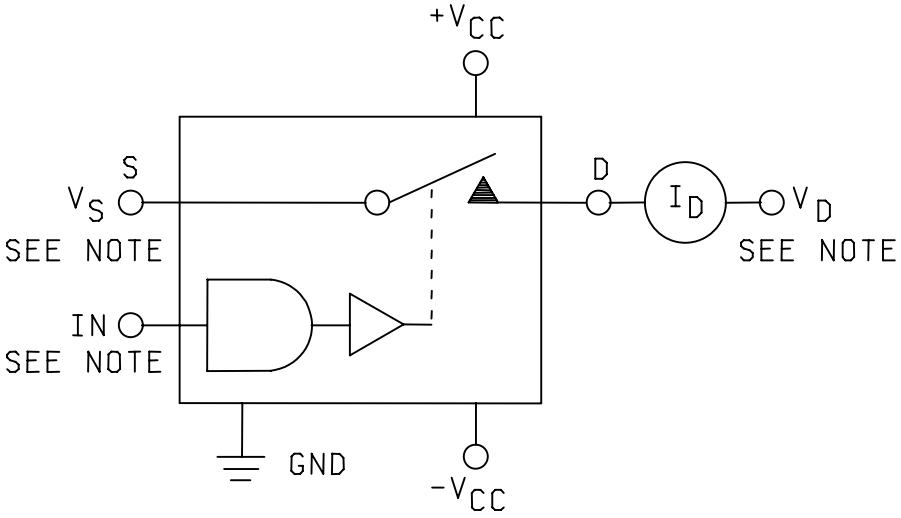


Figure 6. I^+, I^- test circuit.



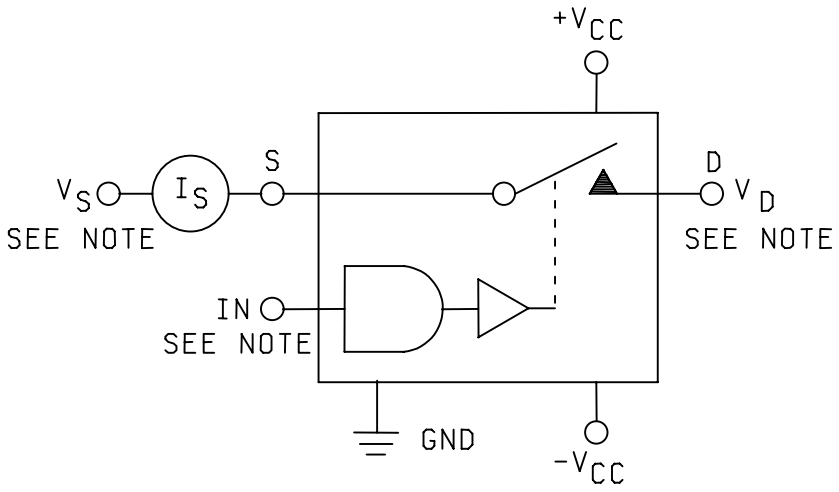
NOTE: Test conditions are from table I.

Figure 7. I_{IL} , I_{IH} test circuit.



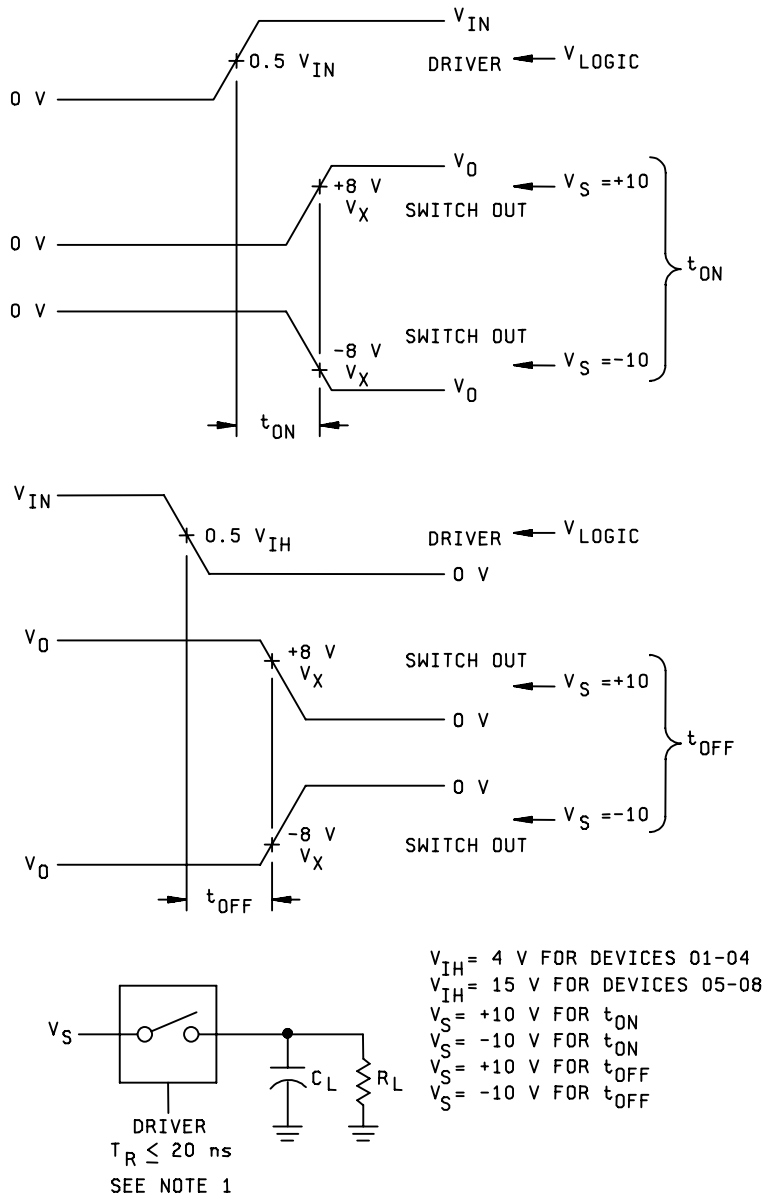
NOTE: Test conditions are from table I.

Figure 8. $I_{D(OFF)}$ test circuit.



NOTE: Test conditions are from table I.

Figure 9. $I_{S(OFF)}$ test circuit.



R_L = 1 kΩ ± 5%
C_L = 100 pF ± 5% (includes test and jig capacitance)

FIGURE 10. Input-output waveforms for time delay tests.

NOTES:

1. The logic driver shall have the following characteristics:

   a. V_{LOGIC} = 0 V to +4 V for parts 01-04.
      V_{LOGIC} = 0 V to +15 V for parts 05-08.
   b. Rise time (0.4 V to 3.6 V) ≤ 20 ns, for part types 01-04
      Fall time (3.6 V to 0.4 V) ≤ 20 ns, for part types 01-04

      Rise time (1.5 V to 13.5 V) ≤ 20 ns, for part types 05-08
      Fall time (13.5 V to 1.5 V) ≤ 20 ns, for part types 05-08

2. See 3.5.1 for appropriate switching conditions.
3. V_{SOURCE} (V_S) = +10 V and –10 V for t_{ON}.
   V_{SOURCE} (V_S) = +10 V and –10 V for t_{OFF}.
4. V_X = +8 V for +10 V condition in note 3 above.
   V_X = -8 V for -10 V condition in note 3 above.

FIGURE 10. Input-output waveforms for time delay tests – Continued.

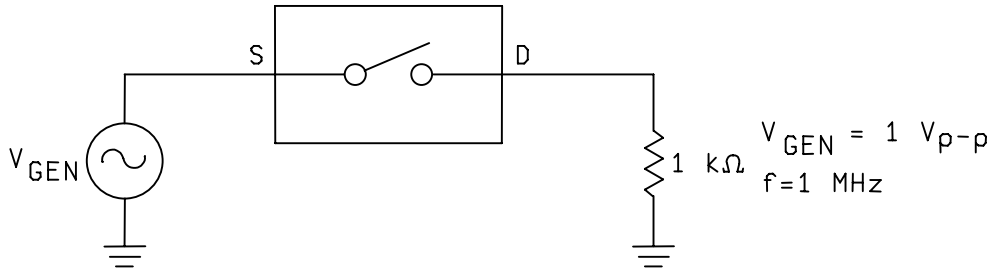


FIGURE 11. Isolation test circuit.

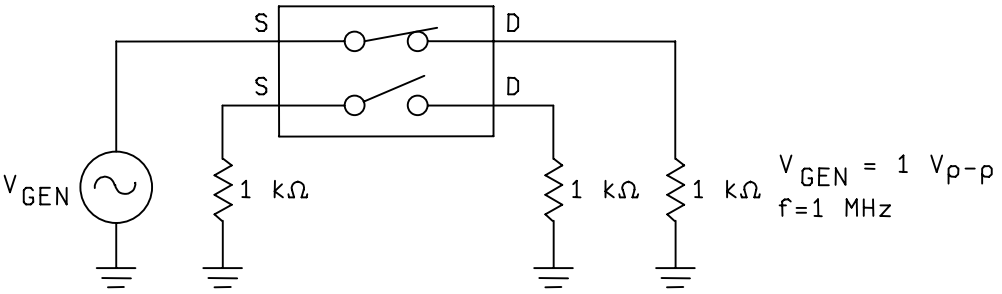


FIGURE 12. Crosstalk test circuit.

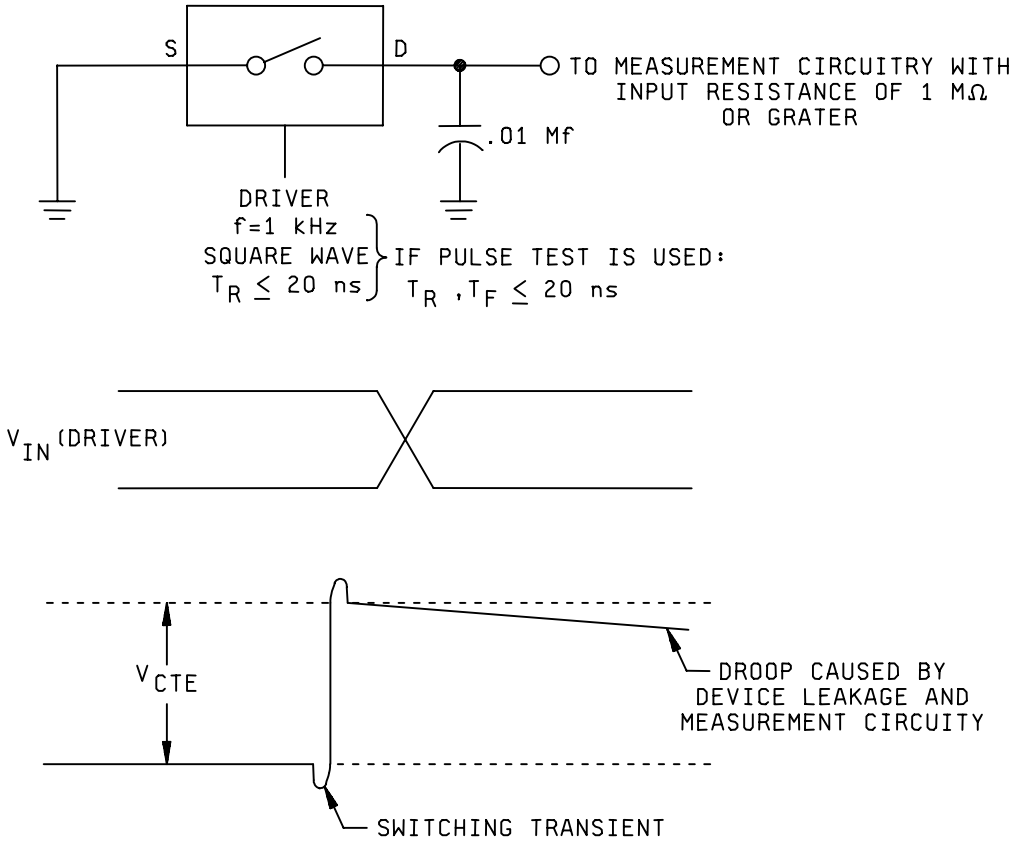
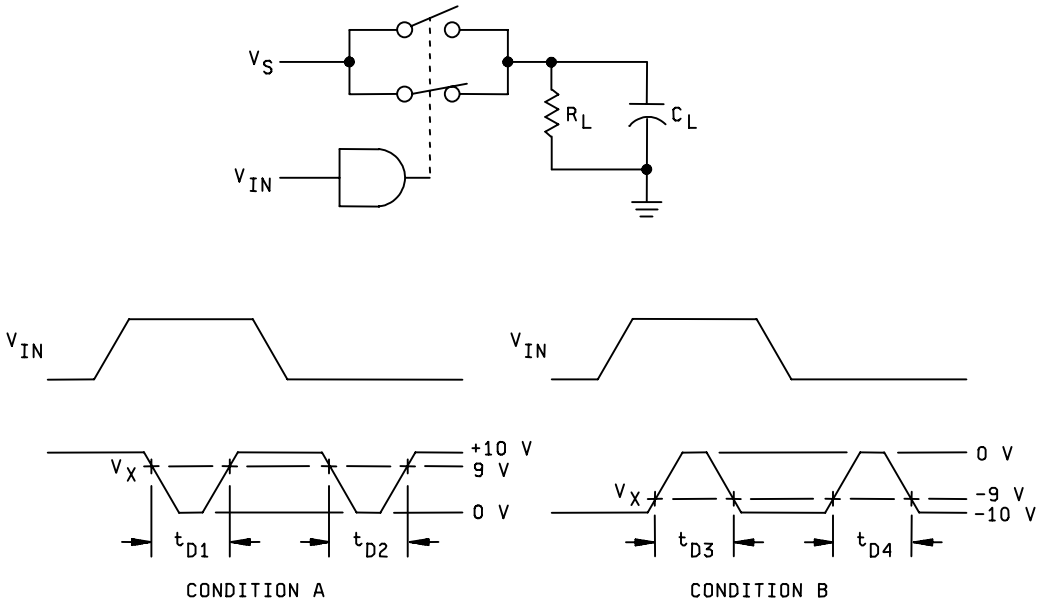


FIGURE 13. Charge transfer error test circuit.



NOTES:
1. R_L = 1 kΩ ±5%, C_L = 100 pF ±5%.
2. T_{D1}, T_{D2}, T_{D3}, and T_{D4} shall be measured. These measurements shall apply only to device types 02, 04, 06, and 08. See 3.5.1 for switch conditions.
3. V_{SOURCE} (V_S) = +10 V for condition A (all part types).
   V_{SOURCE} (V_S) = -10 V for condition B (all part types).
4. V_X = +9 V for condition A (all part types).
   V_X = -9 V for condition B (all part types).
5. The logic driver shall have the following characteristics:

   a. V_{LOGIC} = 0 V to +4 V for parts 01-04.
      V_{LOGIC} = 0 V to +15 V for parts 05-08.
   b. Rise time (0.4 V to 3.6 V) ≤ 20 ns, for part types 01-04
      Fall time (3.6 V to 0.4 V) ≤ 20 ns, for part types 01-04

      Rise time (1.5 V to 13.5 V) ≤ 20 ns, for part types 05-08
      Fall time (13.5 V to 1.5 V) ≤ 20 ns, for part types 05-08

FIGURE 14. Break-before-make test circuit.

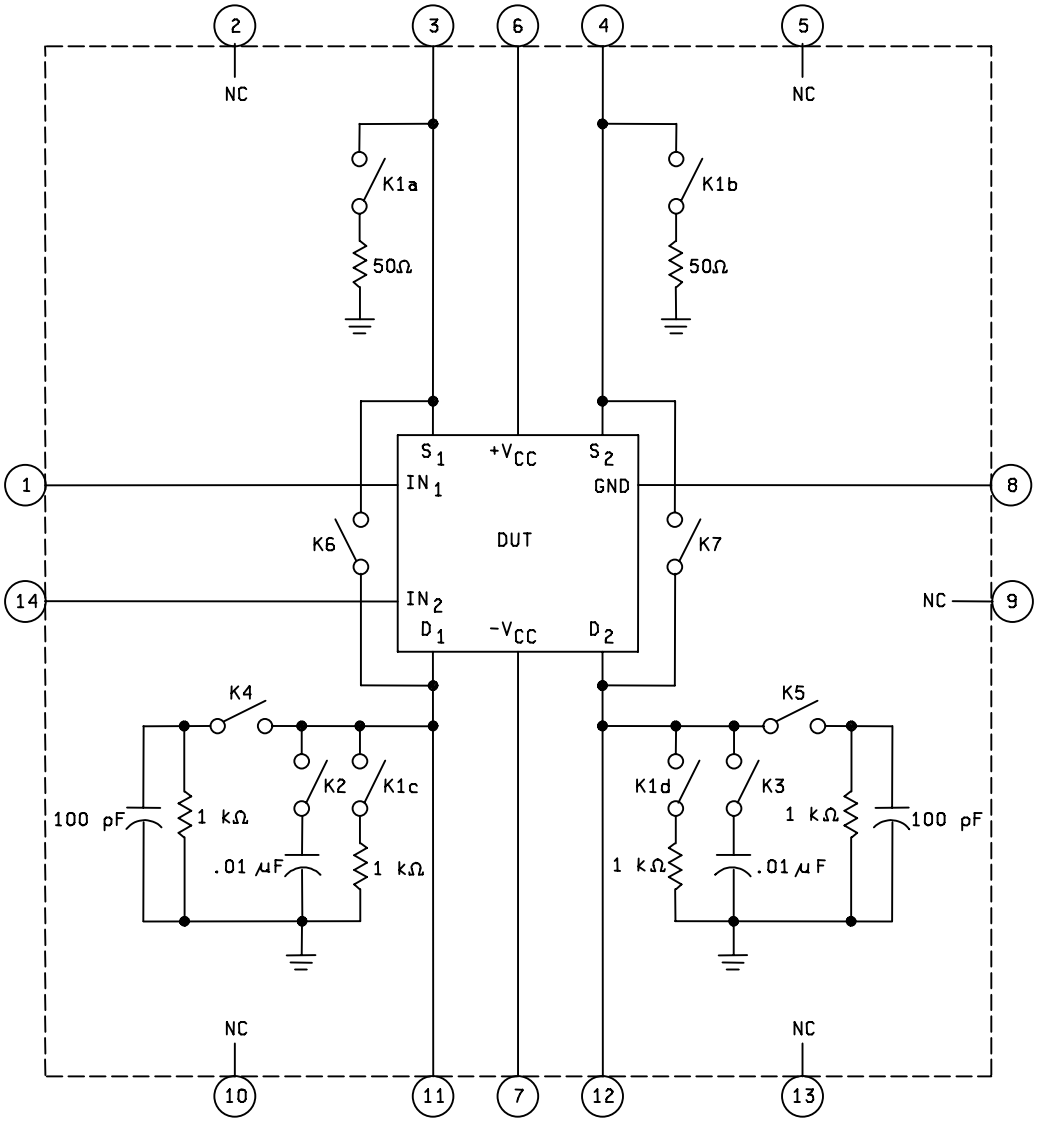


FIGURE 15. Test circuit (static and dynamic tests) for device types 01 and 05.

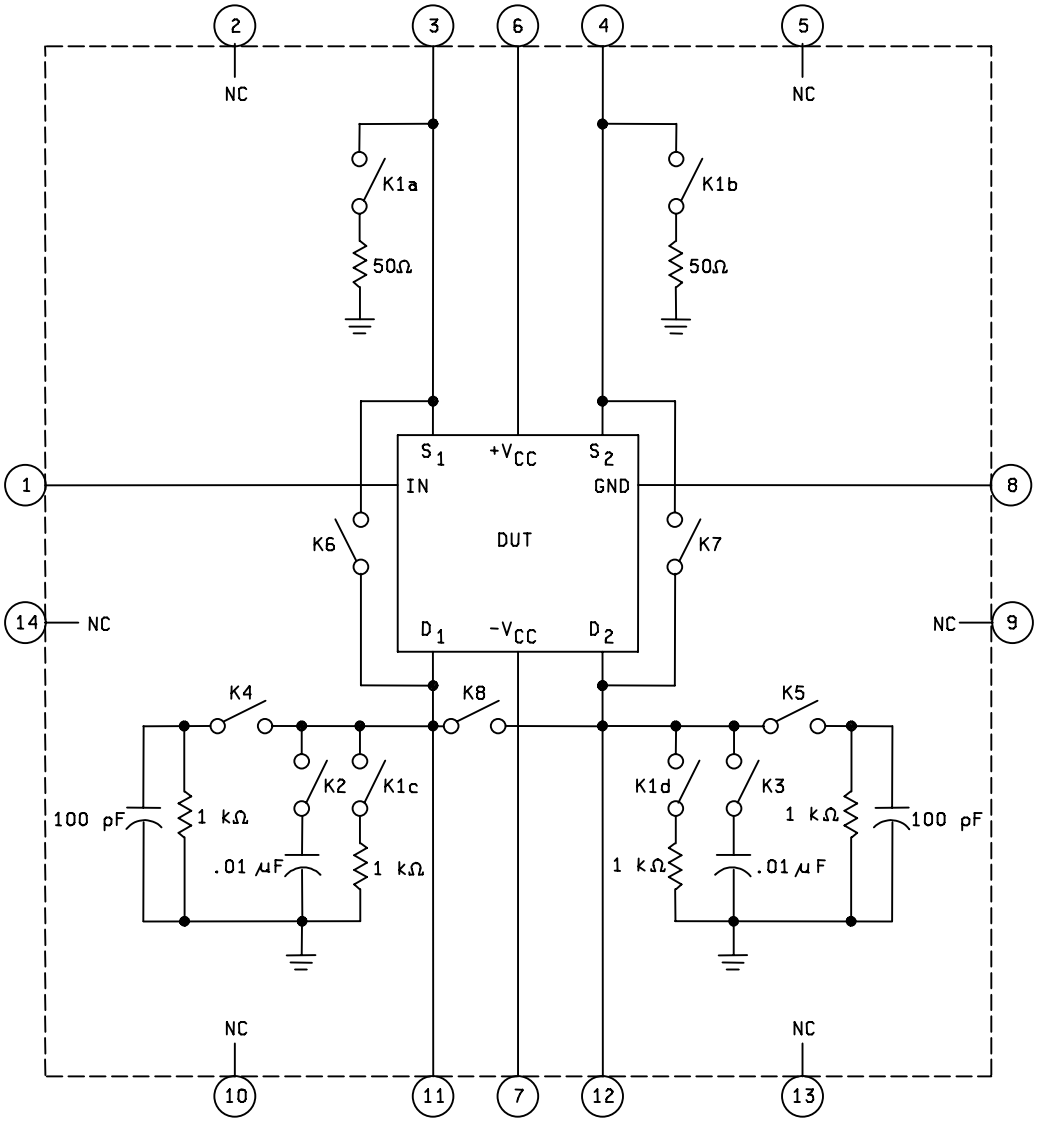


FIGURE 16. Test circuit (static and dynamic tests) for device types 02 and 06.

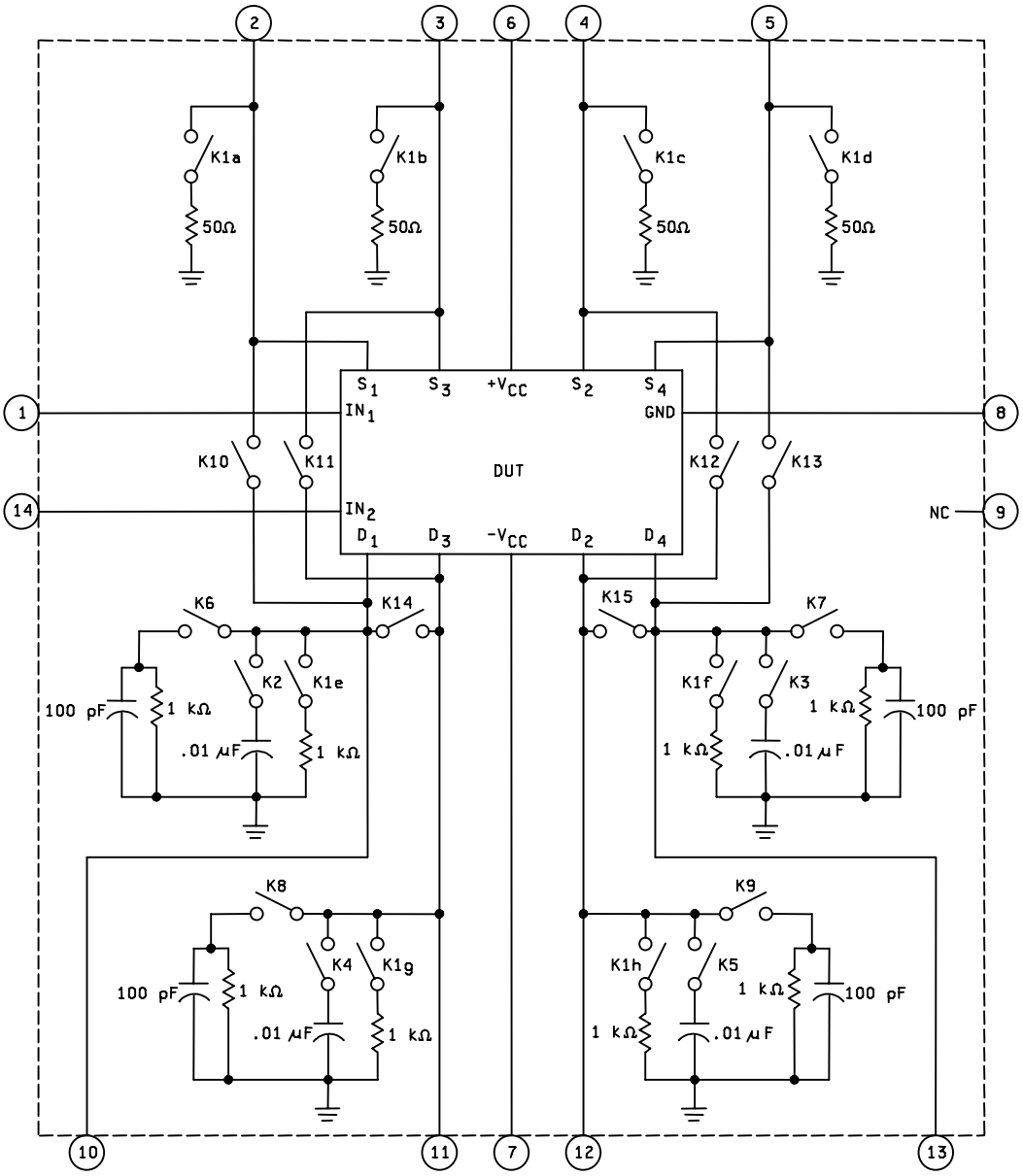


FIGURE 17. Test circuit (static and dynamic tests) for device types 03, 04, 07, and 08.

TABLE III. Group A inspection for device type 01.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 IN_2			Min	Max	
1	R_{DS}	1	4.0 V		10 mA			15 V	-15 V	GND			-10.0 V				None	3		-9.5	V 2/
T_A =+25°C		2				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.5	"
		3	4.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		4				-10 mA		"	"	"				10.0 v		4.0 V	"	4	9.5		"
		5	4.0 V		10 mA			10 V	-10 V	"			-7.5 V				"	3		-6.8	"
		6				10 mA		"	"	"				-7.5 V		4.0 V	"	4		-6.8	"
		7	4.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
		8				-10 mA		"	"	"				7.5 V		4.0 V	"	4	6.8		"
	$I_{D(ON)}$	9	4.0 V		14.0 V			15 V	-15 V	"			14.0 V				K6	3	-1	1	nA
		10				14.0 V		"	"	"				14.0 V		4.0 V	K7	4	-1	1	"
		11	4.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-2	2	"
		12				-14.0 V		"	"	"				-14.0V		4.0 V	K7	4	-2	2	"
	$I_{D(OFF)}$	13	0.8 V		-14.0 V			"	"	"			14.0 V				None	11	-1	1	"
		14				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		15	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		16				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
	$I_{S(OFF)}$	17	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		18				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		19	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		20				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
	I_{IL}	21	0.0 V					"	"	"							"	1	"		µA
	I_{IL}	22						"	"	"						0.0 V	"	14	"		"
	I_{IH}	23	5.0 V					"	"	"							"	1	"		"
		24						"	"	"						5.0 V	"	14	"		"
		25	15.0 V					"	"	"							"	1		1	"
		26						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	27	0.8 V					"	"	"						0.8 V	"	6		0.01	mA
	$+I_{CC}$	28	4.0 V					"	"	"						4.0 V	"	6		1.0	"
	$-I_{CC}$	29	0.8 V					"	"	"						0.8 V	"	7	-0.01		"
	$-I_{CC}$	30	4.0 V					"	"	"						4.0 V	"	7	-0.01		"
2	R_{DS}	31	4.0 V		10 mA			15 V	-15 V	"			-10.0 V				"	3		-9.25	V 2/
T_A =+125°C		32				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.25	"
		33	4.0 V		-10 mA			"	"	"			10.0 v				"	3	9.25		"
		34				-10 mA		"	"	"				10.0 v		4.0 V	"	4	9.25		"
		35	4.0 V		10 mA			10 V	-10 V	"			-7.5 V				"	3		-6.5	"
		36				10 mA		"	"	"				-7.5 V		4.0 V	"	4		-6.5	"
		37	4.0 V		-10 mA			"	"	"			7.5 V				"	3	6.5		"
		38				-10 mA		"	"	"				7.5 V		4.0 V	"	4	6.5		"
	$I_{D(ON)}$	39	4.0 V		14.0 V			15 V	-15 V	"			14.0 V				K6	3	-100	100	nA
		40				14.0 V		"	"	"				14.0 V		4.0 V	K7	4	-100	100	"
		41	4.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
		42				-14.0 V		"	"	"				-14.0V		4.0 V	K7	4	-200	200	"
	$I_{D(OFF)}$	43	0.8 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		44				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		45	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		46				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
	$I_{S(OFF)}$	47	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		48				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		49	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		50				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 01 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 IN_2			Min	Max	
2	I_{IL}	51	0.0 V					15.0 V	-15.0 V	GND							None	1	-1		µA
T_A=+125°C	I_{IL}	52						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	53	5.0 V					"	"	"							"	1	-1		"
		54						"	"	"						5.0 V	"	14	-1		"
		55	15.0 V					"	"	"							"	1		1	"
		56						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	57	0.8 V					"	"	"						0.8 V	"	6		0.1	mA
		58	4.0 V					"	"	"						4.0 V	"	6		1.0	"
	$-I_{CC}$	59	0.8 V					"	"	"						0.8 V	"	7	-0.1		"
		60	4.0 V					"	"	"						4.0 V	"	7	-0.1		"
3	R_{DS}	61	4.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	V 2/
T_A =-55°C		62				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.5	"
		63	4.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		64				-10 mA		"	"	"				10.0 v		4.0 V	"	4	9.5		"
		65	4.0 V		10 mA			10 V	-10 V	"			-7.5 V				"	3		-6.8	"
		66				10 mA		"	"	"				-7.5 V		4.0 V	"	4		-6.8	"
		67	4.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
		68				-10 mA		"	"	"				7.5 V		4.0 V	"	4	6.8		"
	$I_{D(ON)}$	69	4.0 V		14.0 V			15 V	-15 V	"			14.0 V				K6	3	-100	100	nA
		70				14.0 V		"	"	"				14.0 V		4.0 V	K7	4	-100	100	"
		71	4.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
		72				-14.0 V		"	"	"				-14.0V		4.0 V	K7	4	-200	200	"
	$I_{D(OFF)}$	73	0.8 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		74				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		75	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		76				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
	$I_{S(OFF)}$	77	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		78				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		79	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		80				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
	I_{IL}	81	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	82						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	83	5.0 V					"	"	"							"	1	-1		"
		84						"	"	"						5.0 V	"	14	-1		"
		85	15.0 V					"	"	"							"	1		1	"
		86						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	87	0.8 V					"	"	"						0.8 V	"	6		0.01	mA
		88	4.0 V					"	"	"						4.0 V	"	6		2.0	"
	$-I_{CC}$	89	0.8 V					"	"	"						0.8 V	"	7	-0.01		"
		90	4.0 V					"	"	"						4.0 V	"	7	-0.01		"
4	V_{CTE}	91	IN 3/		GND			"	"	"							K2	11		15	mV
T_A = 25°C		92				GND		"	"	"						IN 3/	K3	12		15	mV
7	V_{CT}	93	4.0 V		IN 4/											0.8 V	K1	12		3.16	mV_{p-p}
T_A = 25°C			$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																50		dB
	V_{ISO}	94	0.8 V		IN 4/			15 V	-15 V	GND							K1	11		3.16	mV_{p-p}
		95				IN 4/		15 V	-15 V	GND						0.8 V	K1	12		3.16	mV_{p-p}
			$dB_{ISO} = -20 \log (V_{OUT}/V_{IN})$																50		dB

See footnotes at end of table.

TABLE III. Group A inspection for device type 01 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 IN_2			Min	Max	
9 T_A = 25°C	t_{ON}	96 97	IN		IN	 IN		15.0 V “	-15.0 V “	GND “			OUT	 OUT		 IN	K4 K5	1 to11 14 to12		300 300	ns “
	t_{OFF}	98 99	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		250 250	“ “
10 T_A = 125°C	t_{ON}	100 101	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to11 14 to12		360 360	“ “
	t_{OFF}	102 103	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		290 290	“ “
11 T_A = -55°C	t_{ON}	104 105	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to11 14 to12		260 260	“ “
	t_{OFF}	106 107	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		230 230	“ “
12 T_A = 25°C	C_{C1}	108 109	0.0 V					“ “	“ “	“ “						0.0 V	None “	1 14		15 15	pF “
	C_{C2}	110 111	15.0 V					“ “	“ “	“ “						15.0 V	“ “	1 14		10 10	“ “
	C_{IS}	112 113						“ “	“ “	“ “							“ “	3 4		30 30	“ “
	C_{OS}	114 115						“ “	“ “	“ “							“ “	11 12		30 30	“ “

See footnotes at end of table.

TABLE III. Group A inspection for device type 02.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 NC			Min	Max	
1	R_{DS}	1	0.8 V			10 mA		15 V	-15 V	GND				-10.0 V			None	4		-9.5	V 2/
T_A =+25°C		2	4.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		3	0.8 V			-10 mA		"	"	"				10.0 v			"	4	9.5		"
		4	4.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		5	0.8 V			10 mA		10 V	-10 V	"				-7.5 V			"	4		-6.8	"
		6	4.0 V		10 mA			"	"	"			-7.5 V				"	3		-6.8	"
		7	0.8 V			-10 mA		"	"	"				7.5 V			"	4	6.8		"
		8	4.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
	$I_{D(ON)}$	9	0.8 V			14.0 V		15 V	-15 V	"				14.0 V			K7	4	-1	1	nA
		10	4.0 V		14.0 V			"	"	"			14.0 V				K6	3	-1	1	"
		11	0.8 V			-14.0 V		"	"	"				-14.0 V			K7	4	-2	2	"
		12	4.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-2	2	"
	$I_{D(OFF)}$	13	0.8 V		-14.0 V			"	"	"			14.0 V				None	11	-1	1	"
		14	4.0 V			-14.0 V		"	"	"				14.0 V			"	12	"	"	"
		15	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		16	4.0 V			14.0 V		"	"	"				-14.0 V			"	12	"	"	"
	$I_{S(OFF)}$	17	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		18	4.0 V			-14.0 V		"	"	"				14.0 V			"	4	"	"	"
		19	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		20	4.0 V			14.0 V		"	"	"				-14.0 V			"	4	"	"	"
	I_{IL}	21	0.0 V					"	"	"							"	1	-1		µA
	I_{IH}	22	5.0 V					"	"	"							"	1	-1		µA
	I_{IH}	23	15.0 V					"	"	"							"	1		1	µA
	$+I_{CC}$	24	0.8 V					"	"	"							"	6		0.01	mA
	$+I_{CC}$	25	4.0 V					"	"	"							"	6		0.5	"
	$-I_{CC}$	26	0.8 V					"	"	"							"	7	-0.01		"
	$-I_{CC}$	27	4.0 V					"	"	"							"	7	-0.01		"
2	R_{DS}	28	0.8 V			10 mA		15 V	-15 V	"				-10.0 V			"	4		-9.25	V 2/
T_A = 125°C		29	4.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.25	"
		30	0.8 V			-10 mA		"	"	"				10.0 v			"	4	9.25		"
		31	4.0 V		-10 mA			"	"	"			10.0 v				"	3	9.25		"
		32	0.8 V			10 mA		10 V	-10 V	"				-7.5 V			"	4		-6.5	"
		33	4.0 V		10 mA			"	"	"			-7.5 V				"	3		-6.5	"
		34	0.8 V			-10 mA		"	"	"				7.5 V			"	4	6.5		"
		35	4.0 V		-10 mA			"	"	"			7.5 V				"	3	6.5		"
	$I_{D(ON)}$	36	0.8 V			14.0 V		15 V	-15 V	"				14.0 V			K7	4	-100	100	nA
		37	4.0 V		14.0 V			"	"	"			14.0 V				K6	3	-100	100	"
		38	0.8 V			-14.0 V		"	"	"				-14.0 V			K7	4	-200	200	"
		39	4.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
	$I_{D(OFF)}$	40	0.8 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		41	4.0 V			-14.0 V		"	"	"				14.0 V			"	12	"	"	"
		42	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		43	4.0 V			14.0 V		"	"	"				-14.0 V			"	12	"	"	"
	$I_{S(OFF)}$	44	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		45	4.0 V			-14.0 V		"	"	"				14.0 V			"	4	"	"	"
		46	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		47	4.0 V			14.0 V		"	"	"				-14.0 V			"	4	"	"	"
	I_{IL}	48	0.0 V					"	"	"							"	1	-1		µA

See footnotes at end of table.

TABLE III. Group A inspection for device type 02 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 NC			Min	Max	
2	I_{IH}	49	5.0 V					15.0 V	-15.0 V	GND							None	1	-1		µA
T_A =125°C	I_{IH}	50	15.0 V					"	"	"							"	1		1	µA
	$+I_{CC}$	51	0.8 V					"	"	"							"	6		0.1	mA
	$+I_{CC}$	52	4.0 V					"	"	"							"	6		0.5	"
	$-I_{CC}$	53	0.8 V					"	"	"							"	7	-0.1		"
	$-I_{CC}$	54	4.0 V					"	"	"							"	7	-0.1		"
3	R_{DS}	55	0.8 V			10 mA		"	"	"				-10.0 V			"	4		-9.5	V 2/
T_A = -55°C		56	4.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		57	0.8 V			-10 mA		"	"	"				10.0 v			"	4	9.5		"
		58	4.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		59	0.8 V			10 mA		10 V	-10 V	"				-7.5 V			"	4		-6.8	"
		60	4.0 V		10 mA			"	"	"			-7.5 V				"	3		-6.8	"
		61	0.8 V			-10 mA		"	"	"				7.5 V			"	4	6.8		"
		62	4.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
	$I_{D(ON)}$	63	0.8 V			14.0 V		15 V	-15 V	"				14.0 V			K7	4	-100	100	nA
		64	4.0 V		14.0 V			"	"	"			14.0 V				K6	3	-100	100	"
		65	0.8 V			-14.0 V		"	"	"				-14.0 V			K7	4	-200	200	"
		66	4.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
	$I_{D(OFF)}$	67	0.8 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		68	4.0 V			-14.0 V		"	"	"				14.0 V			"	12	"	"	"
		69	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		70	4.0 V			14.0 V		"	"	"				-14.0 V			"	12	"	"	"
	$I_{S(OFF)}$	71	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		72	4.0 V			-14.0 V		"	"	"				14.0 V			"	4	"	"	"
		73	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		74	4.0 V			14.0 V		"	"	"				-14.0 V			"	4	"	"	"
	I_{IL}	75	0.0 V					"	"	"							"	1	-1		µA
	I_{IH}	76	5.0 V					"	"	"							"	1	-1		µA
	I_{IH}	77	15.0 V					"	"	"							"	1		1	µA
	$+I_{CC}$	78	0.8 V					"	"	"							"	6		0.01	mA
	$+I_{CC}$	79	4.0 V					"	"	"							"	6		1.0	"
	$-I_{CC}$	80	0.8 V					"	"	"							"	7	-0.01		"
	$-I_{CC}$	81	4.0 V					"	"	"							"	7	-0.01		"
4	V_{CTE}	82	IN 3/		GND			"	"	"							K2	11		15	mV
T_A = 25°C		83	IN 3/			GND		"	"	"							K3	12		15	mV
7	V_{CT}	84	4.0 V		IN 4/												K1	12		3.16	mV_{p-p}
T_A = 25°C	$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																		50		dB
	V_{ISO}	85	4.0 V			IN 4/		15.0 V	-15.0 V	GND							K1	12		3.16	mV_{p-p}
		86	0.8 V		IN 4/			15.0 V	-15.0 V	GND							K1	11		3.16	mV_{p-p}
	$dB_{ISO} = -20 \log (V_{OUT}/V_{IN})$																		50		dB
9	t_{ON}	87	IN		IN			15.0 V	-15.0 V	GND			OUT				K4	11		300	ns
T_A = 25°C		88	"			IN		"	"	"				OUT			K5	12		300	"
	t_{OFF}	89	"		IN			"	"	"			OUT				K4	11		250	"
		90	"			IN		"	"	"				OUT			K5	12		250	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 02 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 NC			Min	Max	
10 T_A = 125°C	t_{ON}	91 92	IN IN		IN	 IN		15.0 V “	-15.0 V “	GND “			OUT	 OUT			K4 K5	11 12		360 360	“ “
	t_{OFF}	93 94	IN IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT			K4 K5	11 12		290 290	“ “
11 T_A = -55°C	t_{ON}	95 96	IN IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT			K4 K5	11 12		260 260	“ “
	t_{OFF}	97 98	IN IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT			K4 K5	11 12		230 230	“ “
12 T_A = 25°C	C_{C1}	99	0.0 V					“	“	“							None	1		15	pF
	C_{C2}	100	15.0 V					“	“	“							“	1		10	“
	C_{IS} C_{IS}	101 102						“ “	“ “	“ “							“ “	3 4		30 30	“ “
	C_{OS} C_{OS}	103 104						“ “	“ “	“ “							“ “	11 12		30 30	“ “
13 T_A = -55°C	t_D t_D	105 106	IN IN		IN IN	IN IN		“ “	“ “	“ “							K4,K8 K4,K8	11 12	15 15		ns “

See footnotes at end of table.

TABLE III. Group A inspection for device type 03.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
1	R_{DS}	1	4.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.5	V 2/
T_A = 25°C		2	4.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		3				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.5	"
		4					10 mA	"	"	"					-10.0 V	4.0 V	"	5		-9.5	"
		5	4.0 V	-10 mA				"	"	"		10.0 V					"	2	9.5		"
		6	4.0 V		-10 mA			"	"	"			10.0 V				"	3	9.5		"
		7				-10 mA		"	"	"				10.0 V		4.0 V	"	4	9.5		"
		8					-10 mA	"	"	"					10.0 V	4.0 V	"	5	9.5		"
		9	4.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.8	"
		10	4.0 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		11				10 mA		"	"	"				-7.5 V		4.0 V	"	4		"	"
		12					10 mA	"	"	"					-7.5 V	4.0 V	"	5		"	"
		13	4.0 V	-10 mA				"	"	"		7.5 V					"	2	6.8		"
		14	4.0 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		15				-10 mA		"	"	"				7.5 V		4.0 V	"	4	"		"
		16					-10 mA	"	"	"					7.5 V	4.0 V	"	5	""		"
	$I_{D(ON)}$	17	4.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-1	1	nA
		18	4.0 V		14.0 V			"	"	"			14.0 V				K11	3	-1	1	"
		19				14.0 V		"	"	"				14.0 V		4.0 V	K12	4	-1	1	"
		20					14.0 V	"	"	"					14.0 V	4.0 V	K13	5	-1	1	"
		21	4.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-2	2	"
		22	4.0 V		-14.0 V			"	"	"			-14.0 V				K11	3	-2	2	"
		23				-14.0 V		"	"	"				-14.0 V		4.0 V	K12	4	-2	2	"
		24					-14.0 V	"	"	"					-14.0 V	4.0 V	K13	5	-2	2	"
	$I_{D(OFF)}$	25	0.8 V	-14.0 V				"	"	"		14.0 V					None	10	-1	1	"
		26	0.8 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		27				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		28					-14.0 V	"	"	"					14.0 V	0.8 V	"	13	"	"	"
		29	0.8 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		30	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		31				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
		32					14.0 V	"	"	"					-14.0 V	0.8 V	"	13	"	"	"
	$I_{S(OFF)}$	33	0.8 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		34	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		35				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		36					-14.0 V	"	"	"					14.0 V	0.8 V	"	5	"	"	"
		37	0.8 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		38	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		39				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
		40					14.0 V	"	"	"					-14.0 V	0.8 V	"	5	"	"	"
	I_{IL}	41	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	42						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	43	5.0 V					"	"	"							"	1	-1		"
		44						"	"	"						5.0 V	"	14	-1		"
		45	15.0 V					"	"	"							"	1		1	"
		46						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	47	0.8 V					"	"	"						0.8 V	"	6		0.01	mA
	$+I_{CC}$	48	4.0 V					"	"	"						4.0 V	"	6		1.0	"
	$-I_{CC}$	49	0.8 V					"	"	"						0.8 V	"	7	-0.01		"
	$-I_{CC}$	50	4.0 V					"	"	"						4.0 V	"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 03 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
2	R_{DS}	51	4.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.25	V 2/
T_A =125°C		52	4.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.25	"
		53				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.25	"
		54					10 mA	"	"	"					-10.0 V	4.0 V	"	5		-9.25	"
		55	4.0 V	-10 mA				"	"	"		10.0 V					"	2	9.25		"
		56	4.0 V		-10 mA			"	"	"			10.0 V				"	3	9.25		"
		57				-10 mA		"	"	"				10.0 V		4.0 V	"	4	9.25		"
		58					-10 mA	"	"	"					10.0 V	4.0 V	"	5	9.25		"
		59	4.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.5	"
		60	4.0 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		61				10 mA		"	"	"				-7.5 V		4.0 V	"	4		"	"
		62					10 mA	"	"	"					-7.5 V	4.0 V	"	5		"	"
		63	4.0 V	-10 mA				"	"	"		7.5 V					"	2	6.5		"
		64	4.0 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		65				-10 mA		"	"	"				7.5 V		4.0 V	"	4	"		"
		66					-10 mA	"	"	"					7.5 V	4.0 V	"	5	"		"
	$I_{D(ON)}$	67	4.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-100	100	nA
		68	4.0 V		14.0 V			"	"	"			14.0 V				K11	3	-100	100	"
		69				14.0 V		"	"	"				14.0 V		4.0 V	K12	4	-100	100	"
		70					14.0 V	"	"	"					14.0 V	4.0 V	K13	5	-100	100	"
		71	4.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-200	200	"
		72	4.0 V		-14.0 V			"	"	"			-14.0 V				K11	3	-200	200	"
		73				-14.0 V		"	"	"				-14.0 V		4.0 V	K12	4	-200	200	"
		74					-14.0 V	"	"	"					-14.0 V	4.0 V	K13	5	-200	200	"
	$I_{D(OFF)}$	75	0.8 V	-14.0 V				"	"	"		14.0 V					None	10	-100	100	"
		76	0.8 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		77				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		78					-14.0 V	"	"	"					14.0 V	0.8 V	"	13	"	"	"
		79	0.8 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		80	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		81				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
		82					14.0 V	"	"	"					-14.0 V	0.8 V	"	13	"	"	"
	$I_{S(OFF)}$	83	0.8 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		84	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		85				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		86					-14.0 V	"	"	"					14.0 V	0.8 V	"	5	"	"	"
		87	0.8 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		88	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		89				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
		90					14.0 V	"	"	"					-14.0 V	0.8 V	"	5	"	"	"
	I_{IL}	91	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	92						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	93	5.0 V					"	"	"							"	1	-1		"
		94						"	"	"						5.0 V	"	14	-1		"
		95	15.0 V					"	"	"							"	1		1	"
		96						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	97	0.8 V					"	"	"						0.8 V	"	6		0.1	mA
	$+I_{CC}$	98	4.0 V					"	"	"						4.0 V	"	6		1.0	"
	$-I_{CC}$	99	0.8 V					"	"	"						0.8 V	"	7	-0.1		"
	$-I_{CC}$	100	4.0 V					"	"	"						4.0 V	"	7	-0.1		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 03 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
3	R_{DS}	101	4.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.5	V 2/
T_A= -55°C		102	4.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		103				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.5	"
		104					10 mA	"	"	"					-10.0 V	4.0 V	"	5		-9.5	"
		105	4.0 V	-10 mA				"	"	"		10.0 V					"	2	9.5		"
		106	4.0 V		-10 mA			"	"	"			10.0 V				"	3	9.5		"
		107				-10 mA		"	"	"				10.0 V		4.0 V	"	4	9.5		"
		108					-10 mA	"	"	"					10.0 V	4.0 V	"	5	9.5		"
		109	4.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.8	"
		110	4.0 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		111				10 mA		"	"	"				-7.5 V		4.0 V	"	4		"	"
		112					10 mA	"	"	"					-7.5 V	4.0 V	"	5		"	"
		113	4.0 V	-10 mA				"	"	"		7.5 V					"	2	6.8		"
		114	4.0 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		115				-10 mA		"	"	"				7.5 V		4.0 V	"	4	"		"
		116					-10 mA	"	"	"					7.5 V	4.0 V	"	5	"		"
	$I_{D(ON)}$	117	4.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-100	100	nA
		118	4.0 V		14.0 V			"	"	"			14.0 V				K11	3	-100	100	"
		119				14.0 V		"	"	"				14.0 V		4.0 V	K12	4	-100	100	"
		120					14.0 V	"	"	"					14.0 V	4.0 V	K13	5	-100	100	"
		121	4.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-200	200	"
		122	4.0 V		-14.0 V			"	"	"			-14.0 V				K11	3	-200	200	"
		123				-14.0 V		"	"	"				-14.0 V		4.0 V	K12	4	-200	200	"
		124					-14.0 V	"	"	"					-14.0 V	4.0 V	K13	5	-200	200	"
	$I_{D(OFF)}$	125	0.8 V	-14.0 V				"	"	"		14.0 V					None	10	-100	100	"
		126	0.8 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		127				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		128					-14.0 V	"	"	"					14.0 V	0.8 V	"	13	"	"	"
		129	0.8 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		130	0.8 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		131				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
		132					14.0 V	"	"	"					-14.0 V	0.8 V	"	13	"	"	"
	$I_{S(OFF)}$	133	0.8 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		134	0.8 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		135				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		136					-14.0 V	"	"	"					14.0 V	0.8 V	"	5	"	"	"
		137	0.8 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		138	0.8 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		139				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
		140					14.0 V	"	"	"					-14.0 V	0.8 V	"	5	"	"	"
	I_{IL}	141	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	142						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	143	5.0 V					"	"	"							"	1	-1		"
		144						"	"	"						5.0 V	"	14	-1		"
		145	15.0 V					"	"	"							"	1		1	"
		146						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	147	0.8 V					"	"	"						0.8 V	"	6		0.01	mA
	$+I_{CC}$	148	4.0 V					"	"	"						4.0 V	"	6		2.0	"
	$-I_{CC}$	149	0.8 V					"	"	"						0.8 V	"	7	-0.01		"
	$-I_{CC}$	150	4.0 V					"	"	"						4.0 V	"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 03 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
4	V_{CTE}	151	IN 3/	GND				15.0 V	-15.0 V	GND							K2	10		15	mV
T_A = 25°C		152	IN 3/		GND			"	"	"							K4	11		"	"
		153				GND		"	"	"						IN 3/	K5	12		"	"
		154					GND	"	"	"						IN 3/	K3	13		"	"
7	V_{CT}	155	4.0 V	IN 4/				"	"	"						0.8 V	K1	12		3.16	mV_{p-p}
T_A = 25°C	V_{CT}	156	0.8 V			IN 4/		"	"	"						4.0 V	K1	10		3.16	mV_{p-p}
	$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																		50		dB
	V_{ISO}	157	0.8 V	IN 4/				15.0 V	-15.0 V	GND							K1	10		3.16	mV_{p-p}
		158	0.8 V		IN 4/			"	"	"							K1	11		3.16	"
		159				IN 4/		"	"	"						0.8 V	K1	12		3.16	"
		160					IN 4/	"	"	"						0.8 V	K1	13		3.16	"
	$dB_{Iso} = -20 \log (V_{OUT}/V_{IN})$																		50		dB
9	t_{ON}	161	IN	IN				15.0 V	-15.0 V	GND		OUT					K6	2 to 10		300	ns
T_A = 25°C		162	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		163				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		164					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	165	IN	IN				"	"	"		OUT					K6	2 to 10		250	"
		166	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		167				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		168					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
10	t_{ON}	169	IN	IN				"	"	"		OUT					K6	2 to 10		360	"
T_A =125°C		170	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		171				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		172					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	173	IN	IN				"	"	"		OUT					K6	2 to 10		290	"
		174	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		175				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		176					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
11	t_{ON}	177	IN	IN				"	"	"		OUT					K6	2 to 10		260	"
T_A =-55°C		178	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		179				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		180					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	181	IN	IN				"	"	"		OUT					K6	2 to 10		230	"
		182	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		183				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		184					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
12	C_{C1}	185	0.0 V					"	"	"							None	1		15	pF
T_A = 25°C		186														0.0 V	"	14		15	"
	C_{C2}	187	15.0 V					"	"	"							"	1		10	"
		188														15.0 V	"	14		10	"
	C_{IS}	189						"	"	"							"	2		30	"
		190						"	"	"							"	3		"	"
		191						"	"	"							"	4		"	"
		192						"	"	"							"	5		"	"
	C_{OS}	193						"	"	"							"	10		"	"
		194						"	"	"							"	11		"	"
		195						"	"	"							"	12		"	"
		196						"	"	"							"	13		"	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 04.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
1	R_{DS}	1	4.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.5	V 2/
T_A = 25°C		2	0.8 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		3				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.5	"
		4					10 mA	"	"	"					-10.0 V	0.8 V	"	5		-9.5	"
		5	4.0 V	-10 mA				"	"	"		10.0 V					"	2	9.5		"
		6	0.8 V		-10 mA			"	"	"			10.0 V				"	3	9.5		"
		7				-10 mA		"	"	"				10.0 V		4.0 V	"	4	9.5		"
		8					-10 mA	"	"	"					10.0 V	0.8 V	"	5	9.5		"
		9	4.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.8	"
		10	0.8 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		11				10 mA		"	"	"				-7.5 V		4.0 V	"	4		"	"
		12					10 mA	"	"	"					-7.5 V	0.8 V	"	5		"	"
		13	4.0 V	-10 mA				"	"	"		7.5 V					"	2	6.8		"
		14	0.8 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		15				-10 mA		"	"	"				7.5 V		4.0 V	"	4	"		"
		16					-10 mA	"	"	"					7.5 V	0.8 V	"	5	"		"
	$I_{D(ON)}$	17	4.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-1	1	nA
		18	0.8 V		14.0 V			"	"	"			14.0 V				K11	3	-1	1	"
		19				14.0 V		"	"	"				14.0 V		4.0 V	K12	4	-1	1	"
		20					14.0 V	"	"	"					14.0 V	0.8 V	K13	5	-1	1	"
		21	4.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-2	2	"
		22	0.8 V		-14.0 V			"	"	"			-14.0 V				K11	3	-2	2	"
		23				-14.0 V		"	"	"				-14.0 V		4.0 V	K12	4	-2	2	"
		24					-14.0 V	"	"	"					-14.0 V	0.8 V	K13	5	-2	2	"
	$I_{D(OFF)}$	25	0.8 V	-14.0 V				"	"	"		14.0 V					None	10	-1	1	"
		26	4.0 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		27				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		28					-14.0 V	"	"	"					14.0 V	4.0 V	"	13	"	"	"
		29	0.8 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		30	4.0 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		31				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
		32					14.0 V	"	"	"					-14.0 V	4.0 V	"	13	"	"	"
	$I_{S(OFF)}$	33	0.8 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		34	4.0 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		35				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		36					-14.0 V	"	"	"					14.0 V	4.0 V	"	5	"	"	"
		37	0.8 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		38	4.0 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		39				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
		40					14.0 V	"	"	"					-14.0 V	4.0 V	"	5	"	"	"
	I_{IL}	41	0.0 V					"	"	"							"	1	"		µA
	I_{IL}	42						"	"	"						0.0 V	"	14	"		"
	I_{IH}	43	5.0 V					"	"	"							"	1	"		"
		44						"	"	"						5.0 V	"	14	"		"
		45	15.0 V					"	"	"							"	1		1	"
		46						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	47	0.8 V					"	"	"						0.8 V	"	6		0.01	mA
	$+I_{CC}$	48	4.0 V					"	"	"						4.0 V	"	6		1.0	"
	$-I_{CC}$	49	0.8 V					"	"	"						0.8 V	"	7	-0.01		"
	$-I_{CC}$	50	4.0 V					"	"	"						4.0 V	"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 04 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
2 T_A =125°C	R_{DS}	51	4.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.25	V 2/
		52	0.8 V		10 mA			"	"	"			-10.0 V				"	3		-9.25	"
		53				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.25	"
		54					10 mA	"	"	"					-10.0 V	0.8 V	"	5		-9.25	"
		55	4.0 V	-10 mA				"	"	"		10.0 V					"	2	9.25		"
		56	0.8 V		-10 mA			"	"	"			10.0 V				"	3	9.25		"
		57				-10 mA		"	"	"				10.0 V		4.0 V	"	4	9.25		"
		58					-10 mA	"	"	"					10.0 V	0.8 V	"	5	9.25		"
		59	4.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.5	"
		60	0.8 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		61				10 mA		"	"	"				-7.5 V		4.0 V	"	4		"	"
		62					10 mA	"	"	"					-7.5 V	0.8 V	"	5		"	"
		63	4.0 V	-10 mA				"	"	"		7.5 V					"	2	6.5		"
		64	0.8 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		65				-10 mA		"	"	"				7.5 V		4.0 V	"	4	"		"
		66					-10 mA	"	"	"					7.5 V	0.8 V	"	5	"		"
	$I_{D(ON)}$	67	4.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-100	100	nA
		68	0.8 V		14.0 V			"	"	"			14.0 V				K11	3	"	"	"
		69				14.0 V		"	"	"				14.0 V		4.0 V	K12	4	"	"	"
		70					14.0 V	"	"	"					14.0 V	0.8 V	K13	5	"	"	"
		71	4.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-200	200	"
		72	0.8 V		-14.0 V			"	"	"			-14.0 V				K11	3	"	"	"
		73				-14.0 V		"	"	"				-14.0 V		4.0 V	K12	4	"	"	"
		74					-14.0 V	"	"	"					-14.0 V	0.8 V	K13	5	"	"	"
	$I_{D(OFF)}$	75	0.8 V	-14.0 V				"	"	"		14.0 V					None	10	-100	100	"
		76	4.0 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		77				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		78					-14.0 V	"	"	"					14.0 V	4.0 V	"	13	"	"	"
		79	0.8 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		80	4.0 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		81				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
		82					14.0 V	"	"	"					-14.0 V	4.0 V	"	13	"	"	"
	$I_{S(OFF)}$	83	0.8 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		84	4.0 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		85				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		86					-14.0 V	"	"	"					14.0 V	4.0 V	"	5	"	"	"
		87	0.8 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		88	4.0 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		89				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
		90					14.0 V	"	"	"					-14.0 V	4.0 V	"	5	"	"	"
	I_{IL}	91	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	92						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	93	5.0 V					"	"	"							"	1	-1		"
		94						"	"	"						5.0 V	"	14	-1		"
		95	15.0 V					"	"	"							"	1		1	"
		96						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	97	0.8 V					"	"	"						0.8 V	"	6		0.1	mA
	$+I_{CC}$	98	4.0 V					"	"	"						4.0 V	"	6		1.0	"
	$-I_{CC}$	99	0.8 V					"	"	"						0.8 V	"	7	-0.1		"
	$-I_{CC}$	100	4.0 V					"	"	"						4.0 V	"	7	-0.1		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 04 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
3	R_{DS}	101	4.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.5	V 2/
T_A =-55°C		102	0.8 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		103				10 mA		"	"	"				-10.0 V		4.0 V	"	4		-9.5	"
		104					10 mA	"	"	"					-10.0 V	0.8 V	"	5		-9.5	"
		105	4.0 V	-10 mA				"	"	"		10.0 V					"	2	9.5		"
		106	0.8 V		-10 mA			"	"	"			10.0 V				"	3	9.5		"
		107				-10 mA		"	"	"				10.0 V		4.0 V	"	4	9.5		"
		108					-10 mA	"	"	"					10.0 V	0.8 V	"	5	9.5		"
		109	4.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.8	"
		110	0.8 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		111				10 mA		"	"	"				-7.5 V		4.0 V	"	4		"	"
		112					10 mA	"	"	"					-7.5 V	0.8 V	"	5		"	"
		113	4.0 V	-10 mA				"	"	"		7.5 V					"	2	6.8		"
		114	0.8 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		115				-10 mA		"	"	"				7.5 V		4.0 V	"	4	"		"
		116					-10 mA	"	"	"					7.5 V	0.8 V	"	5	"		"
	$I_{D(ON)}$	117	4.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-100	100	nA
		118	0.8 V		14.0 V			"	"	"			14.0 V				K11	3	"	"	"
		119				14.0 V		"	"	"				14.0 V		4.0 V	K12	4	"	"	"
		120					14.0 V	"	"	"					14.0 V	0.8 V	K13	5	"	"	"
		121	4.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-200	200	"
		122	0.8 V		-14.0 V			"	"	"			-14.0 V				K11	3	"	"	"
		123				-14.0 V		"	"	"				-14.0 V		4.0 V	K12	4	"	"	"
		124					-14.0 V	"	"	"					-14.0 V	0.8 V	K13	5	"	"	"
	$I_{D(OFF)}$	125	0.8 V	-14.0 V				"	"	"		14.0 V					None	10	-100	100	"
		126	4.0 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		127				-14.0 V		"	"	"				14.0 V		0.8 V	"	12	"	"	"
		128					-14.0 V	"	"	"					14.0 V	4.0 V	"	13	"	"	"
		129	0.8 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		130	4.0 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		131				14.0 V		"	"	"				-14.0 V		0.8 V	"	12	"	"	"
		132					14.0 V	"	"	"					-14.0 V	4.0 V	"	13	"	"	"
	$I_{S(OFF)}$	133	0.8 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		134	4.0 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		135				-14.0 V		"	"	"				14.0 V		0.8 V	"	4	"	"	"
		136					-14.0 V	"	"	"					14.0 V	4.0 V	"	5	"	"	"
		137	0.8 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		138	4.0 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		139				14.0 V		"	"	"				-14.0 V		0.8 V	"	4	"	"	"
		140					14.0 V	"	"	"					-14.0 V	4.0 V	"	5	"	"	"
	I_{IL}	141	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	142						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	143	5.0 V					"	"	"							"	1	-1		"
		144						"	"	"						5.0 V	"	14	-1		"
		145	15.0 V					"	"	"							"	1		1	"
		146						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	147	0.8 V					"	"	"						0.8 V	"	6		0.01	mA
	$+I_{CC}$	148	4.0 V					"	"	"						4.0 V	"	6		2.0	"
	$-I_{CC}$	149	0.8 V					"	"	"						0.8 V	"	7	-0.01		"
	$-I_{CC}$	150	4.0 V					"	"	"						4.0 V	"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 04 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
4	V_{CTE}	151	IN 3/	GND				15.0 V	-15.0 V	GND							K2	10		15	mV
T_A = 25°C		152	IN 3/		GND			"	"	"							K4	11		"	"
		153				GND		"	"	"						IN 3/	K5	12		"	"
		154					GND	"	"	"						IN 3/	K3	13		"	"
7	V_{CT}	155	4.0 V	IN 4/				"	"	"							K1	11		3.16	mV_{p-p}
T_A = 25°C	V_{CT}	156				IN 4/		"	"	"						4.0 V	K1	13		3.16	mV_{p-p}
			$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																50		dB
	V_{ISO}	157	0.8 V	IN 4/				15.0 V	-15.0 V	GND							K1	10		3.16	mV_{p-p}
		158	4.0 V		IN 4/			"	"	"							K1	11		3.16	"
		159				IN 4/		"	"	"						0.8 V	K1	12		3.16	"
		160					IN 4/	"	"	"						4.0 V	K1	13		3.16	
			$dB_{Iso} = -20 \log (V_{OUT}/V_{IN})$																50		dB
9	t_{ON}	161	IN	IN				15.0 V	-15.0 V	GND		OUT					K6	2 to 10		300	ns
T_A = 25°C		162	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		163				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		164					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	165	IN	IN				"	"	"		OUT					K6	2 to 10		250	"
		166	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		167				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		168					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
10	t_{ON}	169	IN	IN				"	"	"		OUT					K6	2 to 10		360	"
T_A =125°C		170	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		171				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		172					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	173	IN	IN				"	"	"		OUT					K6	2 to 10		290	"
		174	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		175				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		176					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
11	t_{ON}	177	IN	IN				"	"	"		OUT					K6	2 to 10		260	"
T_A =-55°C		178	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		179				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		180					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	181	IN	IN				"	"	"		OUT					K6	2 to 10		230	"
		182	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		183				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		184					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
12	C_{C1}	185	0.0 V					"	"	"							None	1		15	pF
T_A = 25°C		186														0.0 V	"	14		15	"
	C_{C2}	187	15.0 V					"	"	"							"	1		10	"
		188														15.0 V	"	14		10	"
	C_{IS}	189						"	"	"							"	2		30	"
		190						"	"	"							"	3		"	"
		191						"	"	"							"	4		"	"
		192						"	"	"							"	5		"	"
	C_{OS}	193						"	"	"							"	10		"	"
		194						"	"	"							"	11		"	"
		195						"	"	"							"	12		"	"
		196						"	"	"							"	13		"	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 04 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
13	t_D	197	IN	IN	IN												K6,K14	11	15		ns
T_A =-55°C		198	IN	IN	IN												K6,K14	11	"		"
		199				IN	IN									IN	K7,K15	12	"		"
		200				IN	IN									IN	K7,K15	12	"		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 05.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 IN_2			Min	Max	
1	R_{DS}	1	11.0 V		10 mA			15.0 V	-15.0 V	GND			-10.0 V				None	3		-9.5	V 2/
T_A =+25°C		2				10 mA		"	"	"				-10.0 V		11.0 V	"	4		-9.5	"
		3	11.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		4				-10 mA		"	"	"				10.0 v		11.0 V	"	4	9.5		"
		5	7.0 V		10 mA			10.0 V	-10.0 V	"			-7.5 V				"	3		-6.8	"
		6				10 mA		"	"	"				-7.5 V		7.0 V	"	4		-6.8	"
		7	7.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
		8				-10 mA		"	"	"				7.5 V		7.0 V	"	4	6.8		"
	$I_{D(ON)}$	9	11.0 V		14.0 V			15.0 V	-15.0 V	"			14.0 V				K6	3	-1	1	nA
		10				14.0 V		"	"	"				14.0 V		11.0 V	K7	4	-1	1	"
		11	11.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-2	2	"
		12				-14.0 V		"	"	"				-14.0V		11.0 V	K7	4	-2	2	"
	$I_{D(OFF)}$	13	3.5 V		-14.0 V			"	"	"			14.0 V				None	11	-1	1	"
		14				-14.0 V		"	"	"				14.0 V		3.5 V	"	12	"	"	"
		15	3.5 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		16				14.0 V		"	"	"				-14.0 V		3.5 V	"	12	"	"	"
	$I_{S(OFF)}$	17	3.5 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		18				-14.0 V		"	"	"				14.0 V		3.5 V	"	4	"	"	"
		19	3.5 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		20				14.0 V		"	"	"				-14.0 V		3.5 V	"	4	"	"	"
	I_{IL}	21	0.0 V					"	"	"							"	1	"		µA
	I_{IL}	22						"	"	"						0.0 V	"	14	"		"
	I_{IH}	23	15.0 V					"	"	"							"	1		1	"
		24						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	25	0.0 V					"	"	"						0.0 V	"	6		0.01	mA
	$+I_{CC}$	26	15.0 V					"	"	"						15.0 V	"	6		0.01	"
	$-I_{CC}$	27	0.0 V					"	"	"						0.0 V	"	7	-0.01		"
	$-I_{CC}$	28	15.0 V					"	"	"						15.0 V	"	7	-0.01		"
2	R_{DS}	29	11.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.25	V 2/
T_A =125°C		30				10 mA		"	"	"				-10.0 V		11.0 V	"	4		-9.25	"
		31	11.0 V		-10 mA			"	"	"			10.0 v				"	3	9.25		"
		32				-10 mA		"	"	"				10.0 v		11.0 V	"	4	9.25		"
		33	7.0 V		10 mA			10.0 V	-10.0 V	"			-7.5 V				"	3		-6.5	"
		34				10 mA		"	"	"				-7.5 V		7.0 V	"	4		-6.5	"
		35	7.0 V		-10 mA			"	"	"			7.5 V				"	3	6.5		"
		36				-10 mA		"	"	"				7.5 V		7.0 V	"	4	6.5		"
	$I_{D(ON)}$	37	11.0 V		14.0 V			15.0 V	-15.0 V	"			14.0 V				K6	3	-100	100	nA
		38				14.0 V		"	"	"				14.0 V		11.0 V	K7	4	-100	100	"
		39	11.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
		40				-14.0 V		"	"	"				-14.0V		11.0 V	K7	4	-200	200	"
	$I_{D(OFF)}$	41	3.5 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		42				-14.0 V		"	"	"				14.0 V		3.5 V	"	12	"	"	"
		43	3.5 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		44				14.0 V		"	"	"				-14.0 V		3.5 V	"	12	"	"	"
	$I_{S(OFF)}$	45	3.5 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		46				-14.0 V		"	"	"				14.0 V		3.5 V	"	4	"	"	"
		47	3.5 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		48				14.0 V		"	"	"				-14.0 V		3.5 V	"	4	"	"	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 05 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 IN_2			Min	Max	
2	I_{IL}	49	0.0 V					15.0 V	-15.0 V	GND							None	1	-1		µA
T_A =125°C		50						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	51	15.0 V					"	"	"							"	1		1	"
		52						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	53	0.0 V					"	"	"						0.0 V	"	6		0. 1	mA
		54	15.0 V					"	"	"						15.0 V	"	6		0.1	"
	$-I_{CC}$	55	0.0 V					"	"	"						0.0 V	"	7	-0.1		"
		56	15.0 V					"	"	"						15.0 V	"	7	-0.1		"
3	R_{DS}	57	11.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	V 2/
T_A =-55°C		58				10 mA		"	"	"				-10.0 V		11.0 V	"	4		-9.5	"
		59	11.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		60				-10 mA		"	"	"				10.0 v		11.0 V	"	4	9.5		"
		61	7.0 V		10 mA			10.0 V	-10.0 V	"			-7.5 V				"	3		-6.8	"
		62				10 mA		"	"	"				-7.5 V		7.0 V	"	4		-6.8	"
		63	7.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
		64				-10 mA		"	"	"				7.5 V		7.0 V	"	4	6.8		"
	$I_{D(ON)}$	65	11.0 V		14.0 V			15.0 V	-15.0 V	"			14.0 V				K6	3	-100	100	nA
		66				14.0 V		"	"	"				14.0 V		11.0 V	K7	4	-100	100	"
		67	11.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
		68				-14.0 V		"	"	"				-14.0V		11.0 V	K7	4	-200	200	"
	$I_{D(OFF)}$	69	3.5 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		70				-14.0 V		"	"	"				14.0 V		3.5 V	"	12	"	"	"
		71	3.5 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		72				14.0 V		"	"	"				-14.0 V		3.5 V	"	12	"	"	"
	$I_{S(OFF)}$	73	3.5 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		74				-14.0 V		"	"	"				14.0 V		3.5 V	"	4	"	"	"
		75	3.5 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		76				14.0 V		"	"	"				-14.0 V		3.5 V	"	4	"	"	"
	I_{IL}	77	0.0 V					"	"	"							"	1	-1		µA
		78						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	79	15.0 V					"	"	"							"	1		1	"
		80						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	81	0.0 V					"	"	"						0.0 V	"	6		0.01	mA
		82	15.0 V					"	"	"						15.0 V	"	6		0.01	"
	$-I_{CC}$	83	0.0 V					"	"	"						0.0 V	"	7	-0.01		"
		84	15.0 V					"	"	"						15.0 V	"	7	-0.01		"
4	V_{CTE}	85	IN 3/		GND			"	"	"							K2	11		15	mV
T_A = 25°C		86				GND		"	"	"						IN 3/	K3	12		15	mV
7	V_{CT}	87	11.0 V		IN 4/			"	"	"						3.5 V	K1	12		3.16	mV_{p-p}
T_A = 25°C		$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																	50		dB
	V_{ISO}	88	3.5 V		IN 4/			15.0 V	-15.0 V	GND							K1	11		3.16	mV_{p-p}
		89				IN 4/		15.0 V	-15.0 V	GND						3.5 V	K1	12		3.16	mV_{p-p}
		$dB_{Iso} = -20 \log (V_{OUT}/V_{IN})$																	50		dB

See footnotes at end of table.

TABLE III. Group A inspection for device type 05 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 IN_2			Min	Max	
9 T_A = 25°C	t_{ON}	90 91	IN		IN	 IN		15.0 V “	-15.0 V “	GND “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		250 250	ns “
	t_{OFF}	92 93	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		150 150	“ “
10 T_A =125°C	t_{ON}	94 95	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		290 290	“ “
	t_{OFF}	96 97	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		160 160	“ “
11 T_A =-55°C	t_{ON}	98 99	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		225 225	“ “
	t_{OFF}	100 101	IN		IN	 IN		“ “	“ “	“ “			OUT	 OUT		 IN	K4 K5	1 to 11 14 to 12		140 140	“ “
12 T_A = 25°C	C_{C1}	102 103	0.0 V					“	“	“						0.0 V	None “	1 14		15 15	pF “
	C_{C2}	104 105	15.0 V					“	“	“						15.0 V	“ “	1 14		10 10	“ “
	C_{IS}	106 107						“	“	“							“ “	3 4		30 30	“ “
	C_{OS}	108 109						“	“	“							“ “	11 12		30 30	“ “

See footnotes at end of table.

TABLE III. Group A inspection for device type 06.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 NC			Min	Max	
1	R_{DS}	1	3.5 V			10 mA		15.0 V	-15.0 V	GND				-10.0 V			None	4		-9.5	V 2/
T_A =+25°C		2	11.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		3	3.5 V			-10 mA		"	"	"				10.0 v			"	4	9.5		"
		4	11.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		5	2.5 V			10 mA		10.0 V	-10.0 V	"				-7.5 V			"	4		-6.8	"
		6	7.0 V		10 mA			"	"	"			-7.5 V				"	3		-6.8	"
		7	2.5 V			-10 mA		"	"	"				7.5 V			"	4	6.8		"
		8	7.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
	$I_{D(ON)}$	9	3.5 V			14.0 V		15.0 V	-15.0 V	"				14.0 V			K7	4	-1	1	nA
		10	11.0 V		14.0 V			"	"	"			14.0 V				K6	3	-1	1	"
		11	3.5 V			-14.0 V		"	"	"				-14.0V			K7	4	-2	2	"
		12	11.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-2	2	"
	$I_{D(OFF)}$	13	3.5 V		-14.0 V			"	"	"			14.0 V				None	11	-1	1	"
		14	11.0 V			-14.0 V		"	"	"				14.0 V			"	12	"	"	"
		15	3.5 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		16	11.0 V			14.0 V		"	"	"				-14.0 V			"	12	"	"	"
	$I_{S(OFF)}$	17	3.5 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		18	11.0 V			-14.0 V		"	"	"				14.0 V			"	4	"	"	"
		19	3.5 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		20	11.0 V			14.0 V		"	"	"				-14.0 V			"	4	"	"	"
	I_{IL}	21	0.0 V					"	"	"							"	1	"		µA
	I_{IH}	22	15.0 V					"	"	"							"	1		1	µA
	$+I_{CC}$	23	0.0 V					"	"	"							"	6		0.01	mA
	$+I_{CC}$	24	15.0 V					"	"	"							"	6		0.01	"
	$-I_{CC}$	25	0.0 V					"	"	"							"	7	-0.01		"
	$-I_{CC}$	26	15.0 V					"	"	"							"	7	-0.01		"
2	R_{DS}	27	3.5 V			10 mA		"	"	"				-10.0 V			"	4		-9.25	V 2/
T_A =125°C		28	11.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.25	"
		29	3.5 V			-10 mA		"	"	"				10.0 v			"	4	9.25		"
		30	11.0 V		-10 mA			"	"	"			10.0 v				"	3	9.25		"
		31	2.5 V			10 mA		10.0 V	-10.0 V	"				-7.5 V			"	4		-6.5	"
		32	7.0 V		10 mA			"	"	"			-7.5 V				"	3		-6.5	"
		33	2.5 V			-10 mA		"	"	"				7.5 V			"	4	6.5		"
		34	7.0 V		-10 mA			"	"	"			7.5 V				"	3	6.5		"
	$I_{D(ON)}$	35	3.5 V			14.0 V		15.0 V	-15.0 V	"				14.0 V			K7	4	-100	100	nA
		36	11.0 V		14.0 V			"	"	"			14.0 V				K6	3	-100	100	"
		37	3.5 V			-14.0 V		"	"	"				-14.0V			K7	4	-200	200	"
		38	11.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
	$I_{D(OFF)}$	39	3.5 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		40	11.0 V			-14.0 V		"	"	"				14.0 V			"	12	"	"	"
		41	3.5 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		42	11.0 V			14.0 V		"	"	"				-14.0 V			"	12	"	"	"
	$I_{S(OFF)}$	43	3.5 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		44	11.0 V			-14.0 V		"	"	"				14.0 V			"	4	"	"	"
		45	3.5 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		46	11.0 V			14.0 V		"	"	"				-14.0 V			"	4	"	"	"
	I_{IL}	47	0.0 V					"	"	"							"	1	-1		µA

See footnotes at end of table.

TABLE III. Group A inspection for device type 06 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/ 1 IN	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 NC	Relays energized	Measured pin no.	Limits Min	Limits Max	Unit
2	I_{IH}	48	15.0 V					15.0 V	-15.0 V	GND							None	1		1	µA
T_A =125°C	$+I_{CC}$	49	0.0 V					"	"	"							"	6		0.1	mA
	$+I_{CC}$	50	15.0 V					"	"	"							"	6		0.1	"
	$-I_{CC}$	51	0.0 V					"	"	"							"	7	-0.1		"
	$-I_{CC}$	52	15.0 V					"	"	"							"	7	-0.1		"
3	R_{DS}	53	3.5 V			10 mA		"	"	"				-10.0 V			"	4		-9.5	V 2/
T_A =-55°C		54	11.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		55	3.5 V			-10 mA		"	"	"				10.0 v			"	4	9.5		"
		56	11.0 V		-10 mA			"	"	"			10.0 v				"	3	9.5		"
		57	2.5 V			10 mA		10.0 V	-10.0 V	"				-7.5 V			"	4		-6.8	"
		58	7.0 V		10 mA			"	"	"			-7.5 V				"	3		-6.8	"
		59	2.5 V			-10 mA		"	"	"				7.5 V			"	4	6.8		"
		60	7.0 V		-10 mA			"	"	"			7.5 V				"	3	6.8		"
	$I_{D(ON)}$	61	3.5 V			14.0 V		15.0 V	-15.0 V	"				14.0 V			K7	4	-100	100	nA
		62	11.0 V		14.0 V			"	"	"			14.0 V				K6	3	-100	100	"
		63	3.5 V			-14.0 V		"	"	"				-14.0V			K7	4	-200	200	"
		64	11.0 V		-14.0 V			"	"	"			-14.0 V				K6	3	-200	200	"
	$I_{D(OFF)}$	65	3.5 V		-14.0 V			"	"	"			14.0 V				None	11	-100	100	"
		66	11.0 V			-14.0 V		"	"	"				14.0 V			"	12	"	"	"
		67	3.5 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		68	11.0 V			14.0 V		"	"	"				-14.0 V			"	12	"	"	"
	$I_{S(OFF)}$	69	3.5 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		70	11.0 V			-14.0 V		"	"	"				14.0 V			"	4	"	"	"
		71	3.5 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		72	11.0 V			14.0 V		"	"	"				-14.0 V			"	4	"	"	"
	I_{IL}	73	0.0 V					"	"	"							"	1	-1		µA
	I_{IH}	74	15.0 V					"	"	"							"	1		1	µA
	$+I_{CC}$	75	0.0 V					"	"	"							"	6		0.01	mA
	$+I_{CC}$	76	15.0 V					"	"	"							"	6		0.01	"
	$-I_{CC}$	77	0.0 V					"	"	"							"	7	-0.01		"
	$-I_{CC}$	78	15.0 V					"	"	"							"	7	-0.01		"
4	V_{CTE}	79	IN 3/		GND			"	"	"							K2	11		15	mV
T_A = 25°C		80	IN 3/			GND		"	"	"							K3	12		15	mV
7	V_{CT}	81	11.0 V		IN 4/			"	"	"							K1	12		3.16	mV_{p-p}
T_A = 25°C			$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																50		dB
	V_{ISO}	82	11.0 V			IN 4/		15.0 V	-15.0 V	GND							K1	12		3.16	mV_{p-p}
		83	3.5 V		IN 4/			15.0 V	-15.0 V	GND							K1	11		3.16	mV_{p-p}
			$dB_{ISO} = -20 \log (V_{OUT}/V_{IN})$																50		dB
9	t_{ON}	84	IN		IN			15.0 V	-15.0 V	GND			OUT				K4	11		250	ns
T_A = 25°C		85	IN			IN		"	"	"				OUT			K5	12		250	"
	t_{OFF}	86	IN		IN			"	"	"			OUT				K4	11		150	"
		87	IN			IN		"	"	"				OUT			K5	12		150	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 06 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN	2 NC	3 S_1	4 S_2	5 NC	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 NC	11 D_1	12 D_2	13 NC	14 NC			Min	Max	
2	t_{ON}	88	IN		IN			15.0 V	-15.0 V	GND			OUT				K4	11		290	ns
T_A =125°C	t_{ON}	89	"			IN		"	"	"				OUT			K5	12		290	"
	t_{OFF}	90	"		IN			"	"	"			OUT				K4	11		160	"
	t_{OFF}	91	"			IN		"	"	"				OUT			K5	12		160	"
11	t_{ON}	92	"		IN			"	"	"			OUT				K4	11		225	"
T_A =-55°C	t_{ON}	93	"			IN		"	"	"				OUT			K5	12		225	"
	t_{OFF}	94	"		IN			"	"	"			OUT				K4	11		140	"
	t_{OFF}	95	"			IN		"	"	"				OUT			K5	12		140	"
12	C_{C1}	96	0.0 V					"	"	"							None	1		15	pF
T_A = 25°C	C_{C2}	97	15.0 V					"	"	"							"	1		10	"
	C_{IS}	98						"	"	"							"	3		30	"
		99						"	"	"							"	4		30	"
	C_{OS}	100						"	"	"							"	11		30	"
		101						"	"	"							"	12		30	"
13	t_D	102	IN		IN	IN		"	"	"							K4,K8	11	15		ns
T_A =-55°C		103	IN		IN	IN		"	"	"							K4,K8	11	15		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 07.

Subgroup	Symbol	Test no.	Adapter pin number 1/															Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
1	R_{DS}	1	11.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V						None	2		-9.5	V 2/
T_A = 25°C		2	11.0 V		10 mA			"	"	"			-10.0 V					"	3		-9.5	"
		3				10 mA		"	"	"				-10.0 V		11.0 V		"	4		-9.5	"
		4					10 mA	"	"	"					-10.0 V	11.0 V		"	5		-9.5	"
		5	11.0 V	-10 mA				"	"	"		10.0 V						"	2	9.5		"
		6	11.0 V		-10 mA			"	"	"			10.0 V					"	3	9.5		"
		7				-10 mA		"	"	"				10.0 V		11.0 V		"	4	9.5		"
		8					-10 mA	"	"	"					10.0 V	11.0 V		"	5	9.5		"
		9	7.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V						"	2		-6.8	"
		10	7.0 V		10 mA			"	"	"			-7.5 V					"	3		"	"
		11				10 mA		"	"	"				-7.5 V		7.0 V		"	4		"	"
		12					10 mA	"	"	"					-7.5 V	7.0 V		"	5		"	"
		13	7.0 V	-10 mA				"	"	"		7.5 V						"	2	6.8		"
		14	7.0 V		-10 mA			"	"	"			7.5 V					"	3	"		"
		15				-10 mA		"	"	"				7.5 V		7.0 V		"	4	"		"
		16					-10 mA	"	"	"					7.5 V	7.0 V		"	5	"		"
	$I_{D(ON)}$	17	11.0 V	14.0 V				15 V	-15 V	"		14.0 V						K10	2	-1	1	nA
		18	11.0 V		14.0 V			"	"	"			14.0 V					K11	3	-1	1	"
		19				14.0 V		"	"	"				14.0 V		11.0 V		K12	4	-1	1	"
		20					14.0 V	"	"	"					14.0 V	11.0 V		K13	5	-1	1	"
		21	11.0 V	-14.0 V				"	"	"		-14.0 V						K10	2	-2	2	"
		22	11.0 V		-14.0 V			"	"	"			-14.0 V					K11	3	-2	2	"
		23				-14.0 V		"	"	"				-14.0 V		11.0 V		K12	4	-2	2	"
		24					-14.0 V	"	"	"					-14.0 V	11.0 V		K13	5	-2	2	"
	$I_{D(OFF)}$	25	3.5 V	-14.0 V				"	"	"		14.0 V						None	10	-1	1	"
		26	3.5 V		-14.0 V			"	"	"			14.0 V					"	11	"	"	"
		27				-14.0 V		"	"	"				14.0 V		3.5 V		"	12	"	"	"
		28					-14.0 V	"	"	"					14.0 V	3.5 V		"	13	"	"	"
		29	3.5 V	14.0 V				"	"	"		-14.0 V						"	10	"	"	"
		30	3.5 V		14.0 V			"	"	"			-14.0 V					"	11	"	"	"
		31				14.0 V		"	"	"				-14.0 V		3.5 V		"	12	"	"	"
		32					14.0 V	"	"	"					-14.0 V	3.5 V		"	13	"	"	"
	$I_{S(OFF)}$	33	3.5 V	-14.0 V				"	"	"		14.0 V						"	2	"	"	"
		34	3.5 V		-14.0 V			"	"	"			14.0 V					"	3	"	"	"
		35				-14.0 V		"	"	"				14.0 V		3.5 V		"	4	"	"	"
		36					-14.0 V	"	"	"					14.0 V	3.5 V		"	5	"	"	"
		37	3.5 V	14.0 V				"	"	"		-14.0 V						"	2	"	"	"
		38	3.5 V		14.0 V			"	"	"			-14.0 V					"	3	"	"	"
		39				14.0 V		"	"	"				-14.0 V		3.5 V		"	4	"	"	"
		40					14.0 V	"	"	"					-14.0 V	3.5 V		"	5	"	"	"
	I_{IL}	41	0.0 V					"	"	"								"	1	-1		µA
	I_{IL}	42						"	"	"						0.0 V		"	14	-1		"
	I_{IH}	43	15.0 V					"	"	"								"	1		1	"
		44						"	"	"						15.0 V		"	14		1	"
	$+I_{CC}$	45	0.0 V					"	"	"						0.0 V		"	6		0.01	mA
	$+I_{CC}$	46	15.0 V					"	"	"						15.0 V		"	6		0.01	"
	$-I_{CC}$	47	0.0 V					"	"	"						0.0 V		"	7	-0.01		"
	$-I_{CC}$	48	15.0 V					"	"	"						15.0 V		"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 07 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/															Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
2	R_{DS}	49	11.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V						None	2		-9.25	V 2/
T_A =125°C		50	11.0 V		10 mA			"	"	"			-10.0 V					"	3		-9.25	"
		51				10 mA		"	"	"				-10.0 V		11.0 V		"	4		-9.25	"
		52					10 mA	"	"	"					-10.0 V	11.0 V		"	5		-9.25	"
		53	11.0 V	-10 mA				"	"	"		10.0 V						"	2	9.25		"
		54	11.0 V		-10 mA			"	"	"			10.0 V					"	3	9.25		"
		55				-10 mA		"	"	"				10.0 V		11.0 V		"	4	9.25		"
		56					-10 mA	"	"	"					10.0 V	11.0 V		"	5	9.25		"
		57	7.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V						"	2		-6.5	"
		58	7.0 V		10 mA			"	"	"			-7.5 V					"	3		"	"
		59				10 mA		"	"	"				-7.5 V		7.0 V		"	4		"	"
		60					10 mA	"	"	"					-7.5 V	7.0 V		"	5		"	"
		61	7.0 V	-10 mA				"	"	"		7.5 V						"	2	6.5		"
		62	7.0 V		-10 mA			"	"	"			7.5 V					"	3	"		"
		63				-10 mA		"	"	"				7.5 V		7.0 V		"	4	"		"
		64					-10 mA	"	"	"					7.5 V	7.0 V		"	5	"		"
	$I_{D(ON)}$	65	11.0 V	14.0 V				15 V	-15 V	"		14.0 V						K10	2	-100	100	nA
		66	11.0 V		14.0 V			"	"	"			14.0 V					K11	3	"	"	"
		67				14.0 V		"	"	"				14.0 V		11.0 V		K12	4	"	"	"
		68					14.0 V	"	"	"					14.0 V	11.0 V		K13	5	"	"	"
		69	11.0 V	-14.0 V				"	"	"		-14.0 V						K10	2	-200	200	"
		70	11.0 V		-14.0 V			"	"	"			-14.0 V					K11	3	"	"	"
		71				-14.0 V		"	"	"				-14.0 V		11.0 V		K12	4	"	"	"
		72					-14.0 V	"	"	"					-14.0 V	11.0 V		K13	5	"	"	"
	$I_{D(OFF)}$	73	3.5 V	-14.0 V				"	"	"		14.0 V						None	10	-100	100	"
		74	3.5 V		-14.0 V			"	"	"			14.0 V					"	11	"	"	"
		75				-14.0 V		"	"	"				14.0 V		3.5 V		"	12	"	"	"
		76					-14.0 V	"	"	"					14.0 V	3.5 V		"	13	"	"	"
		77	3.5 V	14.0 V				"	"	"		-14.0 V						"	10	"	"	"
		78	3.5 V		14.0 V			"	"	"			-14.0 V					"	11	"	"	"
		79				14.0 V		"	"	"				-14.0 V		3.5 V		"	12	"	"	"
		80					14.0 V	"	"	"					-14.0 V	3.5 V		"	13	"	"	"
	$I_{S(OFF)}$	81	3.5 V	-14.0 V				"	"	"		14.0 V						"	2	"	"	"
		82	3.5 V		-14.0 V			"	"	"			14.0 V					"	3	"	"	"
		83				-14.0 V		"	"	"				14.0 V		3.5 V		"	4	"	"	"
		84					-14.0 V	"	"	"					14.0 V	3.5 V		"	5	"	"	"
		85	3.5 V	14.0 V				"	"	"		-14.0 V						"	2	"	"	"
		86	3.5 V		14.0 V			"	"	"			-14.0 V					"	3	"	"	"
		87				14.0 V		"	"	"				-14.0 V		3.5 V		"	4	"	"	"
		88					14.0 V	"	"	"					-14.0 V	3.5 V		"	5	"	"	"
	I_{IL}	89	0.0 V					"	"	"								"	1	-1		µA
	I_{IL}	90						"	"	"						0.0 V		"	14	-1		"
	I_{IH}	91	15.0 V					"	"	"								"	1		1	"
		92						"	"	"						15.0 V		"	14		1	"
	$+I_{CC}$	93	0.0 V					"	"	"						0.0 V		"	6		0.1	mA
	$+I_{CC}$	94	15.0 V					"	"	"						15.0 V		"	6		0.1	"
	$-I_{CC}$	95	0.0 V					"	"	"						0.0 V		"	7	-0.1		"
	$-I_{CC}$	96	15.0 V					"	"	"						15.0 V		"	7	-0.1		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 07 –Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
3	R_{DS}	97	11.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.5	V 2/
T_A =-55°C		98	11.0 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		99				10 mA		"	"	"				-10.0 V		11.0 V	"	4		-9.5	"
		100					10 mA	"	"	"					-10.0 V	11.0 V	"	5		-9.5	"
		101	11.0 V	-10 mA				"	"	"		10.0 V					"	2	9.5		"
		102	11.0 V		-10 mA			"	"	"			10.0 V				"	3	9.5		"
		103				-10 mA		"	"	"				10.0 V		11.0 V	"	4	9.5		"
		104					-10 mA	"	"	"					10.0 V	11.0 V	"	5	9.5		"
		105	7.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.8	"
		106	7.0 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		107				10 mA		"	"	"				-7.5 V		7.0 V	"	4		"	"
		108					10 mA	"	"	"					-7.5 V	7.0 V	"	5		"	"
		109	7.0 V	-10 mA				"	"	"		7.5 V					"	2	6.8		"
		110	7.0 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		111				-10 mA		"	"	"				7.5 V		7.0 V	"	4	"		"
		112					-10 mA	"	"	"					7.5 V	7.0 V	"	5	"		"
	$I_{D(ON)}$	113	11.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-100	100	nA
		114	11.0 V		14.0 V			"	"	"			14.0 V				K11	3	"	"	"
		115				14.0 V		"	"	"				14.0 V		11.0 V	K12	4	"	"	"
		116					14.0 V	"	"	"					14.0 V	11.0 V	K13	5	"	"	"
		117	11.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-200	200	"
		118	11.0 V		-14.0 V			"	"	"			-14.0 V				K11	3	"	"	"
		119				-14.0 V		"	"	"				-14.0 V		11.0 V	K12	4	"	"	"
		120					-14.0 V	"	"	"					-14.0 V	11.0 V	K13	5	"	"	"
	$I_{D(OFF)}$	121	3.5 V	-14.0 V				"	"	"		14.0 V					None	10	-100	100	"
		122	3.5 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		123				-14.0 V		"	"	"				14.0 V		3.5 V	"	12	"	"	"
		124					-14.0 V	"	"	"					14.0 V	3.5 V	"	13	"	"	"
		125	3.5 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		126	3.5 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		127				14.0 V		"	"	"				-14.0 V		3.5 V	"	12	"	"	"
		128					14.0 V	"	"	"					-14.0 V	3.5 V	"	13	"	"	"
	$I_{S(OFF)}$	129	3.5 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		130	3.5 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		131				-14.0 V		"	"	"				14.0 V		3.5 V	"	4	"	"	"
		132					-14.0 V	"	"	"					14.0 V	3.5 V	"	5	"	"	"
		133	3.5 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		134	3.5 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		135				14.0 V		"	"	"				-14.0 V		3.5 V	"	4	"	"	"
		136					14.0 V	"	"	"					-14.0 V	3.5 V	"	5	"	"	"
	I_{IL}	137	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	138						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	139	15.0 V					"	"	"							"	1		1	"
		140						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	141	0.0 V					"	"	"						0.0 V	"	6		0.01	mA
	$+I_{CC}$	142	15.0 V					"	"	"						15.0 V	"	6		0.01	"
	$-I_{CC}$	143	0.0 V					"	"	"						0.0 V	"	7	-0.01		"
	$-I_{CC}$	144	15.0 V					"	"	"						15.0 V	"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 07 –Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
4	V_{CTE}	145	IN 3/	GND				15.0 V	-15.0 V	GND							K2	10		15	mV
T_A = 25°C		146	IN 3/		GND			"	"	"							K4	11		"	"
		147				GND		"	"	"						IN 3/	K5	12		"	"
		148					GND	"	"	"						IN 3/	K3	13		"	"
7	V_{CT}	149	11.0 V	IN 4/				"	"	"						3.5 V	K1	12		3.16	mV_{p-p}
T_A = 25°C		150	11.0 V		IN 4/			"	"	"						3.5 V	K1	13		3.16	"
		151	3.5 V			IN 4/		"	"	"						11.0 V	K1	10		3.16	"
		152	3.5 V				IN 4/	"	"	"						11.0 V	K1	11		3.16	"
		$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																	50		dB
	V_{ISO}	153	3.5 V	IN 4/				"	"	"							K1	10		3.16	mV_{p-p}
		154	3.5 V		IN 4/			"	"	"							K1	11		3.16	"
		155				IN 4/		"	"	"						3.5 V	K1	12		3.16	"
		156					IN 4/	"	"	"						3.5 V	K1	13		3.16	"
		$dB_{ISO} = -20 \log (V_{OUT}/V_{IN})$																	50		dB
9	t_{ON}	157	IN	IN				15.0 V	-15.0 V	GND		OUT					K6	2 to 10		250	ns
T_A = 25°C		158	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		159				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		160					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	161	IN	IN				"	"	"		OUT					K6	2 to 10		150	"
		162	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		163				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		164					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
10	t_{ON}	165	IN	IN				"	"	"		OUT					K6	2 to 10		290	"
T_A =125°C		166	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		167				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		168					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	169	IN	IN				"	"	"		OUT					K6	2 to 10		160	"
		170	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		171				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		172					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
11	t_{ON}	173	IN	IN				"	"	"		OUT					K6	2 to 10		225	"
T_A =-55°C		174	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		175				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		176					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	177	IN	IN				"	"	"		OUT					K6	2 to 10		140	"
		178	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		179				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		180					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
12	C_{C1}	181	0.0 V					"	"	"							None	1		15	pF
T_A = 25°C		182														0.0 V	"	14		15	"
	C_{C2}	183	15.0 V					"	"	"							"	1		10	"
		184														15.0 V	"	14		10	"
	C_{IS}	185						"	"	"							"	2		30	"
		186						"	"	"							"	3		"	"
		187						"	"	"							"	4		"	"
		188						"	"	"							"	5		"	"
	C_{OS}	189						"	"	"							"	10		"	"
		190						"	"	"							"	11		"	"
		191						"	"	"							"	12		"	"
		192						"	"	"							"	13		"	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 08.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
1	R_{DS}	1	11.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.5	V 2/
T_A = 25°C		2	3.5 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		3				10 mA		"	"	"				-10.0 V		11.0 V	"	4		-9.5	"
		4					10 mA	"	"	"					-10.0 V	3.5 V	"	5		-9.5	"
		5	11.0 V	-10 mA				"	"	"		10.0 V					"	2	9.5		"
		6	3.5 V		-10 mA			"	"	"			10.0 V				"	3	9.5		"
		7				-10 mA		"	"	"				10.0 V		11.0 V	"	4	9.5		"
		8					-10 mA	"	"	"					10.0 V	3.5 V	"	5	9.5		"
		9	7.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.8	"
		10	2.5 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		11				10 mA		"	"	"				-7.5 V		7.0 V	"	4		"	"
		12					10 mA	"	"	"					-7.5 V	2.5 V	"	5		"	"
		13	7.0 V	-10 mA				"	"	"		7.5 V					"	2	6.8		"
		14	2.5 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		15				-10 mA		"	"	"				7.5 V		7.0 V	"	4	"		"
		16					-10 mA	"	"	"					7.5 V	2.5 V	"	5	"		"
	$I_{D(ON)}$	17	11.0 V	14.0 V				15 V	-15 V	"		14.0 V					K10	2	-1	1	nA
		18	3.5 V		14.0 V			"	"	"			14.0 V				K11	3	-1	1	"
		19				14.0 V		"	"	"				14.0 V		11.0 V	K12	4	-1	1	"
		20					14.0 V	"	"	"					14.0 V	3.5 V	K13	5	-1	1	"
		21	11.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-2	2	"
		22	3.5 V		-14.0 V			"	"	"			-14.0 V				K11	3	-2	2	"
		23				-14.0 V		"	"	"				-14.0 V		11.0 V	K12	4	-2	2	"
		24					-14.0 V	"	"	"					-14.0 V	3.5 V	K13	5	-2	2	"
	$I_{D(OFF)}$	25	3.5 V	-14.0 V				"	"	"		14.0 V					None	10	-1	1	"
		26	11.0 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		27				-14.0 V		"	"	"				14.0 V		3.5 V	"	12	"	"	"
		28					-14.0 V	"	"	"					14.0 V	11.0 V	"	13	"	"	"
		29	3.5 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		30	11.0 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		31				14.0 V		"	"	"				-14.0 V		3.5 V	"	12	"	"	"
		32					14.0 V	"	"	"					-14.0 V	11.0 V	"	13	"	"	"
	$I_{S(OFF)}$	33	3.5 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		34	11.0 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		35				-14.0 V		"	"	"				14.0 V		3.5 V	"	4	"	"	"
		36					-14.0 V	"	"	"					14.0 V	11.0 V	"	5	"	"	"
		37	3.5 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		38	11.0 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		39				14.0 V		"	"	"				-14.0 V		3.5 V	"	4	"	"	"
		40					14.0 V	"	"	"					-14.0 V	11.0 V	"	5	"	"	"
	I_{IL}	41	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	42						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	43	15.0 V					"	"	"							"	1		1	"
		44						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	45	0.0 V					"	"	"						0.0 V	"	6		0.01	mA
	$+I_{CC}$	46	15.0 V					"	"	"						15.0 V	"	6		0.01	"
	$-I_{CC}$	47	0.0 V					"	"	"						0.0 V	"	7	-0.01		"
	$-I_{CC}$	48	15.0 V					"	"	"						15.0 V	"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 08 –Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
2	R_{DS}	49	11.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.25	V 2/
T_A =125°C		50	3.5 V		10 mA			"	"	"			-10.0 V				"	3		-9.25	"
		51				10 mA		"	"	"				-10.0 V		11.0 V	"	4		-9.25	"
		52					10 mA	"	"	"					-10.0 V	3.5 V	"	5		-9.25	"
		53	11.0 V	-10 mA				"	"	"		10.0 V					"	2	9.25		"
		54	3.5 V		-10 mA			"	"	"			10.0 V				"	3	9.25		"
		55				-10 mA		"	"	"				10.0 V		11.0 V	"	4	9.25		"
		56					-10 mA	"	"	"					10.0 V	3.5 V	"	5	9.25		"
		57	7.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.5	"
		58	2.5 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		59				10 mA		"	"	"				-7.5 V		7.0 V	"	4		"	"
		60					10 mA	"	"	"					-7.5 V	2.5 V	"	5		"	"
		61	7.0 V	-10 mA				"	"	"		7.5 V					"	2	6.5		"
		62	2.5 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		63				-10 mA		"	"	"				7.5 V		7.0 V	"	4	"		"
		64					-10 mA	"	"	"					7.5 V	2.5 V	"	5	"		"
	$I_{D(ON)}$	65	11.0 V	14.0 V				15.0 V	-15.0 V	"		14.0 V					K10	2	-100	100	nA
		66	3.5 V		14.0 V			"	"	"			14.0 V				K11	3	-100	100	"
		67				14.0 V		"	"	"				14.0 V		11.0 V	K12	4	-100	100	"
		68					14.0 V	"	"	"					14.0 V	3.5 V	K13	5	-100	100	"
		69	11.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-200	200	"
		70	3.5 V		-14.0 V			"	"	"			-14.0 V				K11	3	-200	200	"
		71				-14.0 V		"	"	"				-14.0 V		11.0 V	K12	4	-200	200	"
		72					-14.0 V	"	"	"					-14.0 V	3.5 V	K13	5	-200	200	"
	$I_{D(OFF)}$	73	3.5 V	-14.0 V				"	"	"		14.0 V					None	10	-100	100	"
		74	11.0 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		75				-14.0 V		"	"	"				14.0 V		3.5 V	"	12	"	"	"
		76					-14.0 V	"	"	"					14.0 V	11.0 V	"	13	"	"	"
		77	3.5 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		78	11.0 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		79				14.0 V		"	"	"				-14.0 V		3.5 V	"	12	"	"	"
		80					14.0 V	"	"	"					-14.0 V	11.0 V	"	13	"	"	"
	$I_{S(OFF)}$	81	3.5 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		82	11.0 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		83				-14.0 V		"	"	"				14.0 V		3.5 V	"	4	"	"	"
		84					-14.0 V	"	"	"					14.0 V	11.0 V	"	5	"	"	"
		85	3.5 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		86	11.0 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		87				14.0 V		"	"	"				-14.0 V		3.5 V	"	4	"	"	"
		88					14.0 V	"	"	"					-14.0 V	11.0 V	"	5	"	"	"
	I_{IL}	89	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	90						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	91	15.0 V					"	"	"							"	1		1	"
		92						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	93	0.0 V					"	"	"						0.0 V	"	6		0.1	mA
	$+I_{CC}$	94	15.0 V					"	"	"						15.0 V	"	6		0.1	"
	$-I_{CC}$	95	0.0 V					"	"	"						0.0 V	"	7	-0.1		"
	$-I_{CC}$	96	15.0 V					"	"	"						15.0 V	"	7	-0.1		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 08 – Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/ 1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2	Relays energized	Measured pin no.	Limits Min	Limits Max	Unit
3	R_{DS}	97	11.0 V	10 mA				15.0 V	-15.0 V	GND		-10.0 V					None	2		-9.5	V 2/
T_A =-55°C		98	3.5 V		10 mA			"	"	"			-10.0 V				"	3		-9.5	"
		99				10 mA		"	"	"				-10.0 V		11.0 V	"	4		-9.5	"
		100					10 mA	"	"	"					-10.0 V	3.5 V	"	5		-9.5	"
		101	11.0 V	-10 mA				"	"	"		10.0 V					"	2	9.5		"
		102	3.5 V		-10 mA			"	"	"			10.0 V				"	3	9.5		"
		103				-10 mA		"	"	"				10.0 V		11.0 V	"	4	9.5		"
		104					-10 mA	"	"	"					10.0 V	3.5 V	"	5	9.5		"
		105	7.0 V	10 mA				10.0 V	-10.0 V	"		-7.5 V					"	2		-6.8	"
		106	2.5 V		10 mA			"	"	"			-7.5 V				"	3		"	"
		107				10 mA		"	"	"				-7.5 V		7.0 V	"	4		"	"
		108					10 mA	"	"	"					-7.5 V	2.5 V	"	5		"	"
		109	7.0 V	-10 mA				"	"	"		7.5 V					"	2	6.8		"
		110	2.5 V		-10 mA			"	"	"			7.5 V				"	3	"		"
		111				-10 mA		"	"	"				7.5 V		7.0 V	"	4	"		"
		112					-10 mA	"	"	"					7.5 V	2.5 V	"	5	"		"
	$I_{D(ON)}$	113	11.0 V	14.0 V				15.0 V	-15.0 V	"		14.0 V					K10	2	-100	100	nA
		114	3.5 V		14.0 V			"	"	"			14.0 V				K11	3	"	"	"
		115				14.0 V		"	"	"				14.0 V		11.0 V	K12	4	"	"	"
		116					14.0 V	"	"	"					14.0 V	3.5 V	K13	5	"	"	"
		117	11.0 V	-14.0 V				"	"	"		-14.0 V					K10	2	-200	200	"
		118	3.5 V		-14.0 V			"	"	"			-14.0 V				K11	3	"	"	"
		119				-14.0 V		"	"	"				-14.0 V		11.0 V	K12	4	"	"	"
		120					-14.0 V	"	"	"					-14.0 V	3.5 V	K13	5	"	"	"
	$I_{D(OFF)}$	121	3.5 V	-14.0 V				"	"	"		14.0 V					None	10	-100	100	"
		122	11.0 V		-14.0 V			"	"	"			14.0 V				"	11	"	"	"
		123				-14.0 V		"	"	"				14.0 V		3.5 V	"	12	"	"	"
		124					-14.0 V	"	"	"					14.0 V	11.0 V	"	13	"	"	"
		125	3.5 V	14.0 V				"	"	"		-14.0 V					"	10	"	"	"
		126	11.0 V		14.0 V			"	"	"			-14.0 V				"	11	"	"	"
		127				14.0 V		"	"	"				-14.0 V		3.5 V	"	12	"	"	"
		128					14.0 V	"	"	"					-14.0 V	11.0 V	"	13	"	"	"
	$I_{S(OFF)}$	129	3.5 V	-14.0 V				"	"	"		14.0 V					"	2	"	"	"
		130	11.0 V		-14.0 V			"	"	"			14.0 V				"	3	"	"	"
		131				-14.0 V		"	"	"				14.0 V		3.5 V	"	4	"	"	"
		132					14.0 V	"	"	"					14.0 V	11.0 V	"	5	"	"	"
		133	3.5 V	14.0 V				"	"	"		-14.0 V					"	2	"	"	"
		134	11.0 V		14.0 V			"	"	"			-14.0 V				"	3	"	"	"
		135				14.0 V		"	"	"				-14.0 V		3.5 V	"	4	"	"	"
		136					14.0 V	"	"	"					-14.0 V	11.0 V	"	5	"	"	"
	I_{IL}	137	0.0 V					"	"	"							"	1	-1		µA
	I_{IL}	138						"	"	"						0.0 V	"	14	-1		"
	I_{IH}	139	15.0 V					"	"	"							"	1		1	"
		140						"	"	"						15.0 V	"	14		1	"
	$+I_{CC}$	141	0.0 V					"	"	"						0.0 V	"	6		0.01	mA
	$+I_{CC}$	142	15.0 V					"	"	"						15.0 V	"	6		0.01	"
	$-I_{CC}$	143	0.0 V					"	"	"						0.0 V	"	7	-0.01		"
	$-I_{CC}$	144	15.0 V					"	"	"						15.0 V	"	7	-0.01		"

See footnotes at end of table.

TABLE III. Group A inspection for device type 08 –Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
4	V_{CTE}	145	IN 3/	GND				15.0 V	-15.0 V	GND							K2	10		15	mV
T_A = 25°C		146	IN 3/		GND			"	"	"							K4	11		"	"
		147				GND		"	"	"						IN 3/	K5	12		"	"
		148					GND	"	"	"						IN 3/	K3	13		"	"
7	V_{CT}	149	11.0 V	IN 4/				"	"	"							K1	11		3.16	mV_{p-p}
T_A = 25°C		150	3.5 V		IN 4/			"	"	"							K1	10		3.16	"
		151				IN 4/		"	"	"						11.0 V	K1	13		3.16	"
		152					IN 4/	"	"	"						3.5 V	K1	12		3.16	"
			$dB_{CT} = -20 \log (V_{OUT}/V_{IN})$																50		dB
	V_{ISO}	153	3.5 V	IN 4/				"	"	"							K1	10		3.16	mV_{p-p}
		154	11.0 V		IN 4/			"	"	"							K1	11		3.16	"
		155				IN 4/		"	"	"						3.5 V	K1	12		3.16	"
		156					IN 4/	"	"	"						11.0 V	K1	13		3.16	"
			$dB_{ISO} = -20 \log (V_{OUT}/V_{IN})$																50		dB
9	t_{ON}	157	IN	IN				15.0 V	-15.0 V	GND		OUT					K6	2 to 10		250	ns
T_A = 25°C		158	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		159				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		160					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	161	IN	IN				"	"	"		OUT					K6	2 to 10		150	"
		162	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		163				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		164					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
10	t_{ON}	165	IN	IN				"	"	"		OUT					K6	2 to 10		290	"
T_A =125°C		166	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		167				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		168					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	169	IN	IN				"	"	"		OUT					K6	2 to 10		160	"
		170	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		171				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		172					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
11	t_{ON}	173	IN	IN				"	"	"		OUT					K6	2 to 10		225	"
T_A =-55°C		174	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		175				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		176					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
	t_{OFF}	177	IN	IN				"	"	"		OUT					K6	2 to 10		140	"
		178	IN		IN			"	"	"			OUT				K8	3 to 11		"	"
		179				IN		"	"	"				OUT		IN	K9	4 to 12		"	"
		180					IN	"	"	"					OUT	IN	K7	5 to 13		"	"
12	C_{C1}	181	0.0 V					"	"	"							None	1		15	pF
T_A = 25°C		182														0.0 V	"	14		15	"
	C_{C2}	183	15.0 V					"	"	"							"	1		10	"
		184														15.0 V	"	14		10	"
	C_{IS}	185						"	"	"							"	2		30	"
		186						"	"	"							"	3		"	"
		187						"	"	"							"	4		"	"
		188						"	"	"							"	5		"	"
	C_{OS}	189						"	"	"							"	10		"	"
		190						"	"	"							"	11		"	"
		191						"	"	"							"	12		"	"
		192						"	"	"							"	13		"	"

See footnotes at end of table.

TABLE III. Group A inspection for device type 08 –Continued.

Subgroup	Symbol	Test no.	Adapter pin number 1/														Relays energized	Measured pin no.	Limits		Unit
			1 IN_1	2 S_1	3 S_3	4 S_2	5 S_4	6 $+V_{CC}$	7 $-V_{CC}$	8 GND	9 NC	10 D_1	11 D_3	12 D_2	13 D_4	14 IN_2			Min	Max	
13	t_D	193	IN	IN	IN			15 V	-15 V	GND							K6,K14	11	15		ns
T_A =-55°C		194	IN	IN	IN			"	"	"							K6,K14	11	"		"
		195				IN	IN	"	"	"						IN	K7,K15	12	"		"
		196				IN	IN	"	"	"						IN	K7,K15	12	"		"

NOTES:

1/ The test circuits used with table III are shown in figures 15, 16, and 17. The waveforms on figure 10 apply to all device types as specified within table IV (see tests for t_{ON} and t_{OFF}). The waveforms in figure 14 apply to device types 02, 04, 06, and 08 as specified within table III.

2/ R_{DS} may be measured differentially with respect to V_A. In case of differentially measured voltages, the table III limits representing voltage drop across the tested switch must be maintained.

3/ The input pulse generator shall have the following characteristics: (a) V_{GEN} = 0-4 V for devices 01-04; V_{GEN} = 0-15 V for devices 05-08; Rise time/fall time $\leq$ 20 ns; PRR = 1 kHz at 50 percent duty cycle, or single step changing device from "ON" state to "OFF" state (rise time/fall time $\leq$ 20 ns).

4/ The input generator shall have the following characteristics: V_{GEN} = 1 V_{P-P} at 1 MHz.

4.4.4 Group D inspection. Group D inspection shall be in accordance with table V of MIL-PRF-38535.

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

b. A special subgroup shall be added to group D inspection for class S devices only, and it shall consist of the group A subgroups 4 and 7 as specified in table III herein. This special subgroup shall be performed on each device type that is qualified from those listed in 1.2.1 herein. After initial qualification, the special subgroup shall be performed periodically on a single device type selected from those device types previously qualified. When more than one device type is qualified, the single device type selected shall be different device type for each subsequent periodic inspection until all qualified device types have been inspected. The sequence of single device types shall be repeated to fulfill the periodic inspection requirement.

Table IV. Groups C end point electrical parameters (T_A = 25°C, $\pm V_{CC}$ = ±15 V).

Test	Device types 01 - 08		
	Limits		Delta
	Min	Max	
R_{DS}	+9.50 V	+10.00 V	50 mV
R_{DS}	-10.00 V	-9.50 V	50 mV
$I_{S(OFF)}$	-1 nA	+1 nA	±0.5 nA
$I_{D(OFF)}$	-1 nA	+1 nA	±0.5 nA

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

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

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 personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department of Defense Agency, or within the Military Department'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 (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 acquiring activity in addition to notification of the qualifying activity, if applicable.

f. Requirements for failure analysis (including required test condition of MIL-STD-883, method 5003), 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:.

$+V_{CC}$	Positive supply voltage
$-V_{CC}$	Negative supply voltage
$+I_{CC}$	Positive supply current
$-I_{CC}$	Negative supply current
V_L	Logic supply voltage
I_L	Logic supply current
R_{DS}	Resistance of an “ON” switch
V_D	Drain voltage
V_S	Source voltage
I_D	Drain current
I_S	Source current
$I_{D(ON)}$	Leakage current from an “ON” driver into the switch
$I_{D(OFF)}$	Leakage current into the drain terminal of an “OFF” switch
$I_{S(OFF)}$	Leakage current into the source terminal of an “OFF” switch
t_{ON}	Switching time as defined in figure 10
t_{OFF}	Switching time as defined in figure 10
V_{CTE}	Charge transfer error
V_{CT}	Crosstalk between switches
V_{ISO}	Isolation from source to drain of a closed switch

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-38510 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	300
02	301
03	302
04	303
05	304
06	305
07	306
08	307

6.8 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.

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

Preparing activity:
DLA - CC

Project 5962-2010

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.