

TABLE 1. ELECTRICAL TESTS

TEST	Symbol	CONDITIONS -55 °C <=T _A <= +125°C V ₊ =+15V, V ₋ =-15V, GND=0V, V _{INH} =2.4V, V _{INL} =0.8V Unless otherwise specified	Group A Subgroup	Device type	Limits Min	Limits Max	Units
SWITCH							
Analog-Signal Range	V _{ANALOG}	V _S =±15V NOTE 2	1,2,3	All	-15	15	V
Drain-Source On Resistance	r _{DS(ON)}	I _S =-1mA, V _D =±10V, V _{IN} =0.8V	1,2 3	All		70 100	Ω
Source Off Leakage Current	I _{S(OFF)}	V _S =14V, V _D =-/±14V, V _{IN} =2.4V	1 2,3	All	-2 -100	2 100	nA
Drain Off Leakage Current	I _{D(OFF)}	V _S =14V, V _D =-/±14V, V _{IN} =2.4V	1 2,3	All	-2 -100	2 100	nA
Channel On Leakage Current	I _{D(ON)} + I _{S(ON)}	V _D =V _S =+14V, V _{IN} =0.8V	1 2,3	All	-2 -100	2 100	nA
		V _D =V _S =-14V, V _{IN} =0.8V	1 2,3	All	-2 -200	2 200	
INPUT							
Input Current with Voltage High	I _{INH}	V _{IN} =2.4V	1 2,3	All	-0.5 -1.0		μA
		V _{IN} =15V	1 2,3	All		0.5 1.0	
Input Current with Voltage Low	I _{INL}	V _{IN} =0.8V	1 2,3	All	-0.5 -1.0		μA
SUPPLY							
Positive Supply Current	I+	All channels on or off	1,2 3	All		1.5 2.0	mA
Negative Supply Current	I-	All channels on or off	1,2 3	All	-1.5 -2.0		mA
DYNAMIC							
Turn-On time	t _{ON}	Figure 1	9 10,11	All		600 800	ns
Turn-Off time	t _{OFF}	Figure 1	9 10,11	All		500 650	ns

NOTE 2: V_{REF} may be left open.

FIGURE 1: Switching Time Test Circuit. See commercial datasheet.

TRUTH TABLE

TERMINAL CONNECTION

			Terminal NUMBER	J16	L20
Device Type	Logic	Switch	1	A ₁	NC
HIx-201	0	ON	2	OUT ₁	A ₁
	1	OFF	3	IN ₁	OUT ₁
			4	V-	IN ₁
			5	GND	V-
			6	IN ₄	NC
			7	OUT ₄	GND
			8	A ₄	IN ₄
			9	A ₃	OUT ₄
			10	OUT ₃	A ₄
			11	IN ₃	NC
			12	V _{REF}	A ₃
ORDERING	INFORMATION		13	V+	OUT ₃
	Maxim #	Pkg.	14	IN ₂	IN ₃
	HI1-201/883B	J16	15	OUT ₂	V _{REF}
	HI4-201/883B	L20	16	A ₂	NC
			17		V+
			18		IN ₂
			19		OUT ₂
			20		A ₂

QUALITY ASSURANCE

Sampling and inspection procedures shall be in accordance with MIL-Prf-38535, Appendix A as specified in Mil-Std-883.

Screening shall be in accordance with Method 5004 of Mil-Std-883. Burn-in test Method 1015:

1. Test Condition, A, B, C, or D.
2. TA = +125°C minimum.
3. Interim and final electrical test requirements shall be specified in Table 2.

Quality conformance inspection shall be in accordance with Method 5005 of Mil-Std-883, including Groups A, B, C, and D inspection.

Group A inspection:

1. Tests as specified in Table 2.
2. Selected subgroups in Table 1, Method 5005 of Mil-Std-883 shall be omitted.

Group C and D inspections:

- a. End-point electrical parameters shall be specified in Table 1.
- b. Steady-state life test, Method 1005 of Mil-Std-883:
 1. Test condition A, B, C, D.
 2. TA = +125°C, minimum.
 3. Test duration, 1000 hours, except as permitted by Method 1005 of Mil-Std-883.

TABLE 2. ELECTRICAL TEST REQUIREMENTS

Mil-Std-883 Test Requirements	Subgroups per Method 5005, Table 1
Interim Electric Parameters Method 5004	1
Final Electrical Parameters Method 5005	1*, 2, 3, 9
Group A Test Requirements Method 5005	1, 2, 3, 9, 10**, 11**
Group C and D End-Point Electrical Parameters Method 5005	1

* PDA applies to Subgroup 1 only.