



AiP74AUP1G132

Single 2-Input Nand Gate With Schmitt-Trigger Inputs

Product Specification

Specification Revision History:

Version	Date	Description
2025-09-A0	2025-09	New
2025-11-A1	2025-11	Modify the parameters



Contents

1、General Description.....	3
2、Block Diagram And Pin Description	4
2.1、Block Diagram	4
2.2、Pin Configurations.....	4
2.3、Pin Description.....	5
2.4、Function Table.....	5
3、Electrical Parameter	5
3.1、Absolute Maximum Ratings.....	5
3.2、Recommended Operating Conditions.....	5
3.3、Electrical Characteristics.....	6
3.3.1、DC Characteristics 1	6
3.3.2、DC Characteristics 2	7
3.3.3、DC Characteristics 3.....	8
3.3.4、AC Characteristics 1	9
3.3.5、AC Characteristics 2.....	10
3.3.6、AC Characteristics 3.....	11
4、Testing Circuit	12
4.1、AC Testing Circuit	12
4.2、AC Testing Waveforms.....	12
4.3、Transfer Characteristics Waveforms	13
4.4、Measurement Points	14
4.5、Test Data	14
5、Package Information	15
5.1、XSON6(1*1*0.45)-0.35	15
5.2、XSON6(1*1.45*0.55)-0.5	16
5.3、SOT353	17
5.4、SOT23-5.....	18
5.5、DFN4.....	19
6、Statements And Notes	20
6.1、The name and content of Hazardous substances or Elements in the product	20
6.2、Notes	20



1、General Description

The AiP74AUP1G132 provides the single 2-input NAND Schmitt trigger.

This device ensures a very low static and dynamic power consumption across the entire V_{CC} range from 0.8V to 3.6V.

Features:

- Wide supply voltage range from 0.8V to 3.6V
- Low static power consumption; $I_{CC}=1\mu A$ (maximum)
- Inputs accept voltages up to 3.6V
- Specified from $-40^{\circ}C$ to $+125^{\circ}C$
- Packaging information: XSON6/SOT23-5/SOT353/DFN4

Ordering Information:

Reel packing specifications:

Part number	Packaging form	Marking code	Reel quantity	Boxed reel quantity	Notes
AiP74AUP1G132 GB235.TR	SOT23-5	AiP JI	3000 PCS/reel	30000 PCS/box	Dimensions of plastic enclosure: 2.9mm×1.6mm Pin spacing: 0.95mm
AiP74AUP1G132 GC353.TR	SOT353	JIXX	3000 PCS/reel	30000 PCS/box	Dimensions of plastic enclosure: 2.1mm×1.3mm Pin spacing: 0.65mm
AiP74AUP1G132 XD4.TR	DFN4	JIX	12000 PCS/reel	120000 PCS/box	Dimensions of plastic enclosure: 0.8mm×0.8mm Pin spacing: 0.50mm
AiP74AUP1G132 EA6.TR	XSON6	JI XX	5000 PCS/reel	25000 PCS/box	Dimensions of plastic enclosure: 1.45mm×1.0mm Pin spacing: 0.50mm
AiP74AUP1G132 ED6.TR	XSON6	JI XX	5000 PCS/reel	25000 PCS/box	Dimensions of plastic enclosure: 1.0mm×1.0mm Pin spacing: 0.35mm

Note 1: “XX” refers to variable content, meaning package batch serial number.

Note 2: If the physical information is inconsistent with the ordering information, please refer to the actual product.



2、Block Diagram And Pin Description

2.1、Block Diagram

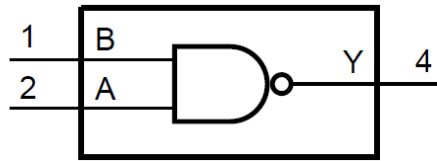


Figure 1. Logic symbol

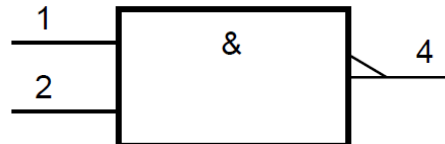


Figure 2. IEC Logic symbol

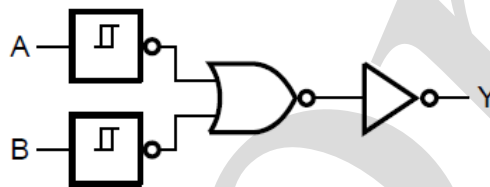
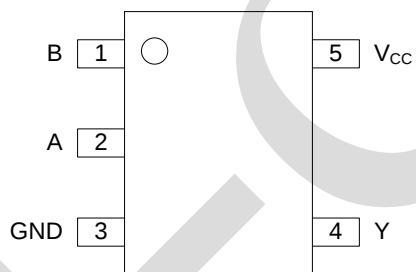
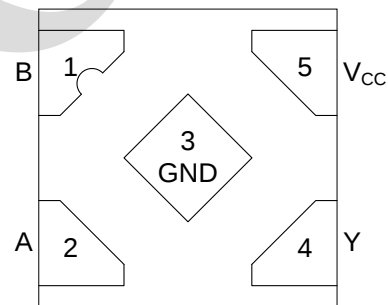


Figure 3. Logic diagram

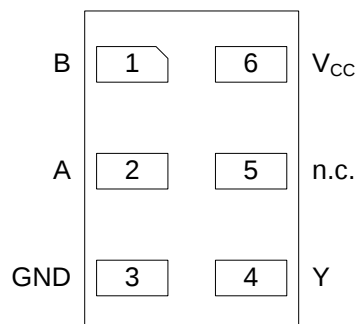
2.2、Pin Configurations



SOT23-5/SOT353



DFN4



XSON6



2.3、Pin Description

Pin No.		Pin Name	Description
SOT23-5/SOT353/DFN4	XSON6		
1	1,	B	data input
2	2	A	data input
3	3	GND	ground (0V)
4	4	Y	data output
-	5	n.c.	not connected
5	6	V _{CC}	supply voltage

2.4、Function Table

Input		Output
A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

Note: H=HIGH voltage level; L=LOW voltage level

3、Electrical Parameter

3.1、Absolute Maximum Ratings

(T_{amb}=25℃, all voltage referenced to GND, unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Max.	Unit
supply voltage	V _{CC}	-	-0.5	+4.6	V
input clamping current	I _{IK}	V _I <0V	-50	-	mA
input voltage	V _I	-	-0.5	+4.6	V
output clamping current	I _{OK}	V _O <0V	-50	-	mA
output voltage	V _O	Active mode and Power-down mode	-0.5	+4.6	V
output current	I _O	V _O =0V to V _{CC}	-	±20	mA
supply current	I _{CC}	-	-	50	mA
ground current	I _{GND}	-	-50	-	mA
storage temperature	T _{stg}	-	-65	+150	℃
total power dissipation	P _{tot}	-	-	250	mW
soldering temperature	T _L	10s	260		℃
Electrostatic discharge	ESD	HBM	8000		V

3.2、Recommended Operating Conditions

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
supply voltage	V _{CC}	-	0.8	-	3.6	V
input voltage	V _I	-	0	-	3.6	V
output voltage	V _O	Active mode	0	-	V _{CC}	V
		Power-down mode; V _{CC} =0V	0	-	3.6	V
ambient temperature	T _{amb}	-	-40	-	+125	℃



3.3、Electrical Characteristics

3.3.1、DC Characteristics 1

($T_{amb}=25^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
positive-going threshold voltage	V _{T+}	see Figure 6 and Figure 7	V _{CC} =0.8V	0.30	-	0.75	V
			V _{CC} =1.1V	0.53	-	1.00	V
			V _{CC} =1.4V	0.74	-	1.20	V
			V _{CC} =1.65V	0.91	-	1.35	V
			V _{CC} =2.3V	1.37	-	1.77	V
			V _{CC} =3.0V	1.88	-	2.29	V
negative-going threshold voltage	V _{T-}	see Figure 6 and Figure 7	V _{CC} =0.8V	0.10	-	0.60	V
			V _{CC} =1.1V	0.26	-	0.65	V
			V _{CC} =1.4V	0.39	-	0.75	V
			V _{CC} =1.65V	0.47	-	0.84	V
			V _{CC} =2.3V	0.69	-	1.04	V
			V _{CC} =3.0V	0.88	-	1.24	V
hysteresis voltage	V _H	(V _{T+} -V _{T-}); see Figure 6, Figure 7 and Figure 8	V _{CC} =0.8V	0.07	-	0.50	V
			V _{CC} =1.1V	0.08	-	0.46	V
			V _{CC} =1.4V	0.18	-	0.56	V
			V _{CC} =1.65V	0.27	-	0.66	V
			V _{CC} =2.3V	0.53	-	0.92	V
			V _{CC} =3.0V	0.79	-	1.31	V
HIGH-level output voltage	V _{OH}	V _I =V _{T+} or V _{T-}	I _O =-20uA; V _{CC} =0.8V to 3.6V	V _{CC} -0.1	-	-	V
			I _O =-1.1mA; V _{CC} =1.1V	0.75×V _{CC}	-	-	V
			I _O =-1.7mA; V _{CC} =1.4V	1.11	-	-	V
			I _O =-1.9mA; V _{CC} =1.65V	1.32	-	-	V
			I _O =-2.3mA; V _{CC} =2.3V	2.05	-	-	V
			I _O =-3.1mA; V _{CC} =2.3V	1.90	-	-	V
			I _O =-2.7mA; V _{CC} =3.0V	2.72	-	-	V
			I _O =-4.0mA; V _{CC} =3.0V	2.60	-	-	V
LOW-level output voltage	V _{OL}	V _I =V _{T+} or V _{T-}	I _O =20uA; V _{CC} =0.8V to 3.6V	-	-	0.10	V
			I _O =1.1mA; V _{CC} =1.1V	-	-	0.30×V _{CC}	V
			I _O =1.7mA; V _{CC} =1.4V	-	-	0.31	V
			I _O =1.9mA; V _{CC} =1.65V	-	-	0.31	V
			I _O =2.3mA; V _{CC} =2.3V	-	-	0.31	V
			I _O =3.1mA; V _{CC} =2.3V	-	-	0.44	V
			I _O =2.7mA; V _{CC} =3.0V	-	-	0.31	V
			I _O =4.0mA; V _{CC} =3.0V	-	-	0.44	V
input leakage current	I _I	V _I =GND to 3.6V; V _{CC} =0V to 3.6V	-	-	±1	uA	



power-off leakage current	I_{OFF}	V_I or $V_O=0V$ to $3.6V$; $V_{CC}=0V$	-	-	± 1	μA
additional power-off leakage current	ΔI_{OFF}	V_I or $V_O=0V$ to $3.6V$; $V_{CC}=0V$ to $0.2V$	-	-	± 1	μA
supply current	I_{CC}	$V_I=GND$ or V_{CC} ; $I_O=0A$; $V_{CC}=0.8V$ to $3.6V$	-	-	1	μA
additional supply current	ΔI_{CC}	$V_I=V_{CC}-0.6V$; $I_O=0A$; $V_{CC}=3.3V$	-	-	40	μA

3.3.2、DC Characteristics 2

($T_{amb}=-40^{\circ}C$ to $+85^{\circ}C$, voltages are referenced to GND (ground=0V), unless otherwise specified.)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
positive-going threshold voltage	V _{T+}	see Figure 6 and Figure 7	V _{CC} =0.8V	0.30	-	0.75	V
			V _{CC} =1.1V	0.53	-	1.00	V
			V _{CC} =1.4V	0.74	-	1.20	V
			V _{CC} =1.65V	0.91	-	1.35	V
			V _{CC} =2.3V	1.37	-	1.77	V
			V _{CC} =3.0V	1.88	-	2.29	V
negative-going threshold voltage	V _{T-}	see Figure 6 and Figure 7	V _{CC} =0.8V	0.10	-	0.60	V
			V _{CC} =1.1V	0.26	-	0.65	V
			V _{CC} =1.4V	0.39	-	0.75	V
			V _{CC} =1.65V	0.47	-	0.84	V
			V _{CC} =2.3V	0.69	-	1.04	V
			V _{CC} =3.0V	0.88	-	1.24	V
hysteresis voltage	V _H	(V _{T+} -V _{T-}); see Figure 6, Figure 7 and Figure 8	V _{CC} =0.8V	0.07	-	0.50	V
			V _{CC} =1.1V	0.08	-	0.46	V
			V _{CC} =1.4V	0.18	-	0.56	V
			V _{CC} =1.65V	0.27	-	0.66	V
			V _{CC} =2.3V	0.53	-	0.92	V
			V _{CC} =3.0V	0.79	-	1.31	V
HIGH-level output voltage	V _{OH}	V _I =V _{T+} or V _{T-}	I _O =-20uA; V _{CC} =0.8V to 3.6V	V _{CC} -0.1	-	-	V
			I _O =-1.1mA; V _{CC} =1.1V	0.70×V _{CC}	-	-	V
			I _O =-1.7mA; V _{CC} =1.4V	1.03	-	-	V
			I _O =-1.9mA; V _{CC} =1.65V	1.30	-	-	V
			I _O =-2.3mA; V _{CC} =2.3V	1.97	-	-	V
			I _O =-3.1mA; V _{CC} =2.3V	1.85	-	-	V
			I _O =-2.7mA; V _{CC} =3.0V	2.67	-	-	V
			I _O =-4.0mA; V _{CC} =3.0V	2.55	-	-	V
LOW-level output voltage	V _{OL}	V _I =V _{T+} or V _{T-}	I _O =20uA; V _{CC} =0.8V to 3.6V	-	-	0.10	V
			I _O =1.1mA; V _{CC} =1.1V	-	-	0.30×V _{CC}	V
			I _O =1.7mA; V _{CC} =1.4V	-	-	0.37	V



			$I_O=1.9\text{mA}; V_{CC}=1.65\text{V}$	-	-	0.35	V
			$I_O=2.3\text{mA}; V_{CC}=2.3\text{V}$	-	-	0.33	V
			$I_O=3.1\text{mA}; V_{CC}=2.3\text{V}$	-	-	0.45	V
			$I_O=2.7\text{mA}; V_{CC}=3.0\text{V}$	-	-	0.33	V
			$I_O=4.0\text{mA}; V_{CC}=3.0\text{V}$	-	-	0.45	V
input leakage current	I_I	$V_I=\text{GND to } 3.6\text{V}; V_{CC}=0\text{V to } 3.6\text{V}$		-	-	± 2	μA
power-off leakage current	I_{OFF}	$V_I \text{ or } V_O=0\text{V to } 3.6\text{V}; V_{CC}=0\text{V}$		-	-	± 2	μA
additional power-off leakage current	ΔI_{OFF}	$V_I \text{ or } V_O=0\text{V to } 3.6\text{V}; V_{CC}=0\text{V to } 0.2\text{V}$		-	-	± 2	μA
supply current	I_{CC}	$V_I=\text{GND or } V_{CC}; I_O=0\text{A}; V_{CC}=0.8\text{V to } 3.6\text{V}$		-	-	2	μA
additional supply current	ΔI_{CC}	$V_I=V_{CC}-0.6\text{V}; I_O=0\text{A}; V_{CC}=3.3\text{V}$		-	-	50	μA

3.3.3、DC Characteristics 3

($T_{\text{amb}}=-40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified.)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
positive-going threshold voltage	V_{T+}	see Figure 6 and Figure 7	$V_{CC}=0.8\text{V}$	0.30	-	0.77	V
			$V_{CC}=1.1\text{V}$	0.53	-	1.02	V
			$V_{CC}=1.4\text{V}$	0.74	-	1.22	V
			$V_{CC}=1.65\text{V}$	0.91	-	1.37	V
			$V_{CC}=2.3\text{V}$	1.37	-	1.80	V
			$V_{CC}=3.0\text{V}$	1.88	-	2.32	V
negative-going threshold voltage	V_{T-}	see Figure 6 and Figure 7	$V_{CC}=0.8\text{V}$	0.10	-	0.60	V
			$V_{CC}=1.1\text{V}$	0.26	-	0.65	V
			$V_{CC}=1.4\text{V}$	0.39	-	0.75	V
			$V_{CC}=1.65\text{V}$	0.47	-	0.84	V
			$V_{CC}=2.3\text{V}$	0.69	-	1.04	V
			$V_{CC}=3.0\text{V}$	0.88	-	1.24	V
hysteresis voltage	V_H	(VT+-VT-); see Figure 6, Figure 7 and Figure 8	$V_{CC}=0.8\text{V}$	0.07	-	0.50	V
			$V_{CC}=1.1\text{V}$	0.08	-	0.46	V
			$V_{CC}=1.4\text{V}$	0.18	-	0.56	V
			$V_{CC}=1.65\text{V}$	0.27	-	0.66	V
			$V_{CC}=2.3\text{V}$	0.53	-	0.92	V
			$V_{CC}=3.0\text{V}$	0.79	-	1.31	V
HIGH-level output voltage	V_{OH}	$V_I=V_{T+} \text{ or } V_{T-}$	$I_O=-20\mu\text{A}; V_{CC}=0.8\text{V to } 3.6\text{V}$	$V_{CC}-0.11$	-	-	V
			$I_O=-1.1\text{mA}; V_{CC}=1.1\text{V}$	$0.60 \times V_{CC}$	-	-	V
			$I_O=-1.7\text{mA}; V_{CC}=1.4\text{V}$	0.93	-	-	V
			$I_O=-1.9\text{mA}; V_{CC}=1.65\text{V}$	1.17	-	-	V
			$I_O=-2.3\text{mA}; V_{CC}=2.3\text{V}$	1.77	-	-	V
			$I_O=-3.1\text{mA}; V_{CC}=2.3\text{V}$	1.67	-	-	V



			$I_O=-2.7\text{mA}; V_{CC}=3.0\text{V}$	2.40	-	-	V
			$I_O=-4.0\text{mA}; V_{CC}=3.0\text{V}$	2.30	-	-	V
LOW-level output voltage	V_{OL}	$V_I=V_{T+}$ or V_{T-}	$I_O=20\mu\text{A}; V_{CC}=0.8\text{V to } 3.6\text{V}$	-	-	0.11	V
			$I_O=1.1\text{mA}; V_{CC}=1.1\text{V}$	-	-	$0.33 \times V_{CC}$	V
			$I_O=1.7\text{mA}; V_{CC}=1.4\text{V}$	-	-	0.41	V
			$I_O=1.9\text{mA}; V_{CC}=1.65\text{V}$	-	-	0.39	V
			$I_O=2.3\text{mA}; V_{CC}=2.3\text{V}$	-	-	0.36	V
			$I_O=3.1\text{mA}; V_{CC}=2.3\text{V}$	-	-	0.50	V
			$I_O=2.7\text{mA}; V_{CC}=3.0\text{V}$	-	-	0.36	V
			$I_O=4.0\text{mA}; V_{CC}=3.0\text{V}$	-	-	0.50	V
input leakage current	I_I	$V_I=\text{GND to } 3.6\text{V}; V_{CC}=0\text{V to } 3.6\text{V}$		-	-	± 4	μA
power-off leakage current	I_{OFF}	V_I or $V_O=0\text{V to } 3.6\text{V}; V_{CC}=0\text{V}$		-	-	± 4	μA
additional power-off leakage current	ΔI_{OFF}	V_I or $V_O=0\text{V to } 3.6\text{V}; V_{CC}=0\text{V to } 0.2\text{V}$		-	-	± 4	μA
supply current	I_{CC}	$V_I=\text{GND or } V_{CC}; I_O=0\text{A}; V_{CC}=0.8\text{V to } 3.6\text{V}$		-	-	4	μA
additional supply current	ΔI_{CC}	$V_I=V_{CC}-0.6\text{V}; I_O=0\text{A}; V_{CC}=3.3\text{V}$		-	-	75	μA

3.3.4、AC Characteristics 1

($T_{amb}=25^\circ\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit	
propagation delay	t_{PLH}, t_{PHL}	A or B to Y; see Figure 5	$C_L=5pF$				
			$V_{CC}=0.8V$	-	22.5	-	ns
			$V_{CC}=1.1V$ to $1.3V$	2.6	6.3	13.4	ns
			$V_{CC}=1.4V$ to $1.6V$	2.2	4.6	8.2	ns
			$V_{CC}=1.65V$ to $1.95V$	1.9	3.9	6.6	ns
			$V_{CC}=2.3V$ to $2.7V$	1.7	3.2	5.3	ns
			$V_{CC}=3.0V$ to $3.6V$	1.6	2.9	4.7	ns
			$C_L=10pF$				
			$V_{CC}=0.8V$	-	26.1	-	ns
			$V_{CC}=1.1V$ to $1.3V$	3.0	7.2	15.4	ns
			$V_{CC}=1.4V$ to $1.6V$	2.5	5.2	9.3	ns
			$V_{CC}=1.65V$ to $1.95V$	2.3	4.5	7.5	ns
			$V_{CC}=2.3V$ to $2.7V$	2.1	3.8	6.1	ns
			$V_{CC}=3.0V$ to $3.6V$	2.0	3.5	5.5	ns
			$C_L=15pF$				
			$V_{CC}=0.8V$	-	29.6	-	ns
			$V_{CC}=1.1V$ to $1.3V$	3.3	8.0	17.2	ns
			$V_{CC}=1.4V$ to $1.6V$	2.8	5.8	10.4	ns
			$V_{CC}=1.65V$ to $1.95V$	2.6	5.0	8.3	ns



			V _{CC} =2.3V to 2.7V	2.3	4.2	6.7	ns
			V _{CC} =3.0V to 3.6V	2.2	3.9	6.1	ns
			C _L =30pF				
			V _{CC} =0.8V	-	39.9	-	ns
			V _{CC} =1.1V to 1.3V	4.3	10.2	22.6	ns
			V _{CC} =1.4V to 1.6V	3.6	7.3	13.3	ns
			V _{CC} =1.65V to 1.95V	3.2	6.3	10.6	ns
			V _{CC} =2.3V to 2.7V	3.0	5.3	8.5	ns
			V _{CC} =3.0V to 3.6V	2.8	5.0	7.8	ns

3.3.5、AC Characteristics 2

(T_{amb}= -40°C to +85°C, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit	
propagation delay	t _{PLH} , t _{PHL}	A or B to Y; see Figure 5	C _L =5pF				
			V _{CC} =1.1V to 1.3V	2.4	-	15.1	ns
			V _{CC} =1.4V to 1.6V	1.9	-	9.7	ns
			V _{CC} =1.65V to 1.95V	1.7	-	7.9	ns
			V _{CC} =2.3V to 2.7V	1.5	-	6.2	ns
			V _{CC} =3.0V to 3.6V	1.4	-	5.6	ns
			C _L =10pF				
			V _{CC} =1.1V to 1.3V	2.7	-	17.3	ns
			V _{CC} =1.4V to 1.6V	2.2	-	11.0	ns
			V _{CC} =1.65V to 1.95V	2.0	-	9.0	ns
			V _{CC} =2.3V to 2.7V	1.8	-	7.2	ns
			V _{CC} =3.0V to 3.6V	1.8	-	6.5	ns
			C _L =15pF				
			V _{CC} =1.1V to 1.3V	3.0	-	19.4	ns
			V _{CC} =1.4V to 1.6V	2.5	-	12.3	ns
			V _{CC} =1.65V to 1.95V	2.3	-	10.0	ns
			V _{CC} =2.3V to 2.7V	2.1	-	7.9	ns
			V _{CC} =3.0V to 3.6V	2.0	-	7.3	ns
			C _L =30pF				
			V _{CC} =1.1V to 1.3V	3.8	-	25.4	ns
			V _{CC} =1.4V to 1.6V	3.2	-	15.8	ns
			V _{CC} =1.65V to 1.95V	2.9	-	12.8	ns
			V _{CC} =2.3V to 2.7V	2.7	-	10.1	ns
			V _{CC} =3.0V to 3.6V	2.7	-	9.2	ns



3.3.6、AC Characteristics 3

($T_{amb} = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit	
propagation delay	t_{PLH}, t_{PHL}	A or B to Y; see Figure 5	$C_L=5\text{pF}$				
			$V_{CC}=1.1\text{V to }1.3\text{V}$	2.4	-	16.6	ns
			$V_{CC}=1.4\text{V to }1.6\text{V}$	1.9	-	10.7	ns
			$V_{CC}=1.65\text{V to }1.95\text{V}$	1.7	-	8.7	ns
			$V_{CC}=2.3\text{V to }2.7\text{V}$	1.5	-	6.6	ns
			$V_{CC}=3.0\text{V to }3.6\text{V}$	1.4	-	6.2	ns
			$C_L=10\text{pF}$				
			$V_{CC}=1.1\text{V to }1.3\text{V}$	2.7	-	19.0	ns
			$V_{CC}=1.4\text{V to }1.6\text{V}$	2.2	-	12.1	ns
			$V_{CC}=1.65\text{V to }1.95\text{V}$	2.0	-	9.9	ns
			$V_{CC}=2.3\text{V to }2.7\text{V}$	1.8	-	7.9	ns
			$V_{CC}=3.0\text{V to }3.6\text{V}$	1.8	-	7.2	ns
			$C_L=15\text{pF}$				
			$V_{CC}=1.1\text{V to }1.3\text{V}$	3.0	-	21.3	ns
			$V_{CC}=1.4\text{V to }1.6\text{V}$	2.5	-	13.5	ns
			$V_{CC}=1.65\text{V to }1.95\text{V}$	2.3	-	11.0	ns
			$V_{CC}=2.3\text{V to }2.7\text{V}$	2.1	-	8.7	ns
			$V_{CC}=3.0\text{V to }3.6\text{V}$	2.0	-	8.0	ns
			$C_L=30\text{pF}$				
			$V_{CC}=1.1\text{V to }1.3\text{V}$	3.8	-	27.9	ns
			$V_{CC}=1.4\text{V to }1.6\text{V}$	3.2	-	17.4	ns
			$V_{CC}=1.65\text{V to }1.95\text{V}$	2.9	-	14.1	ns
			$V_{CC}=2.3\text{V to }2.7\text{V}$	2.7	-	11.1	ns
			$V_{CC}=3.0\text{V to }3.6\text{V}$	2.7	-	10.1	ns



4、Testing Circuit

4.1、AC Testing Circuit

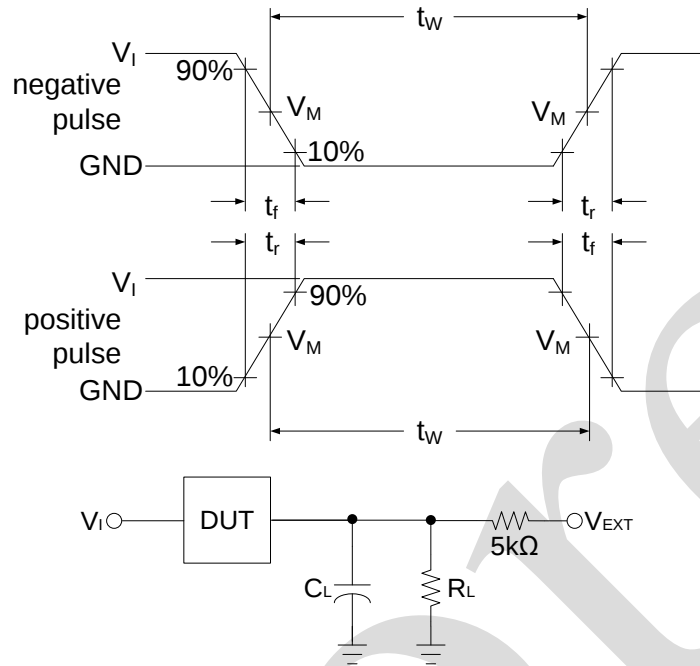


Figure 4. Test circuit for measuring switching times

C_L includes probe and jig capacitance.

R_L =Load resistance.

4.2、AC Testing Waveforms

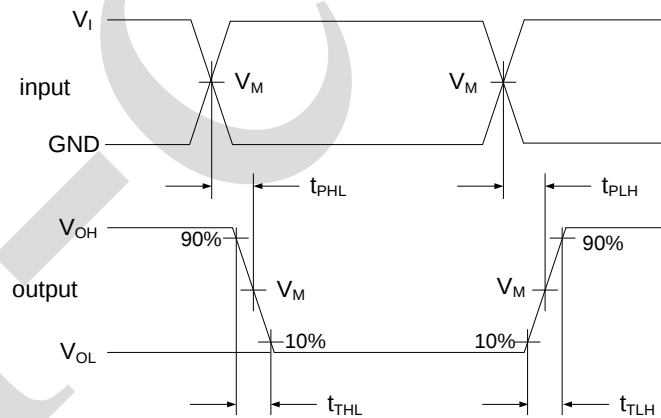


Figure 5. The input (A or B) to output (Y) propagation delays



4.3、Transfer Characteristics Waveforms

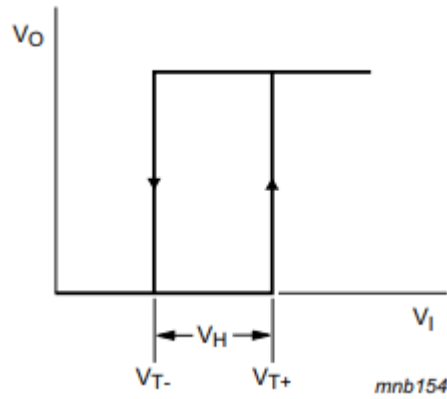


Figure 6. Transfer characteristic

V_{T+} and V_{T-} limits at 70% and 20%:

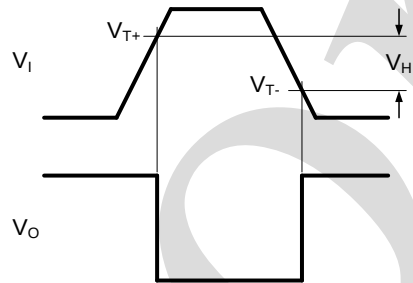


Figure 7. Definition of V_{T+} , V_{T-} and V_H

$V_{CC}=1.8V$:

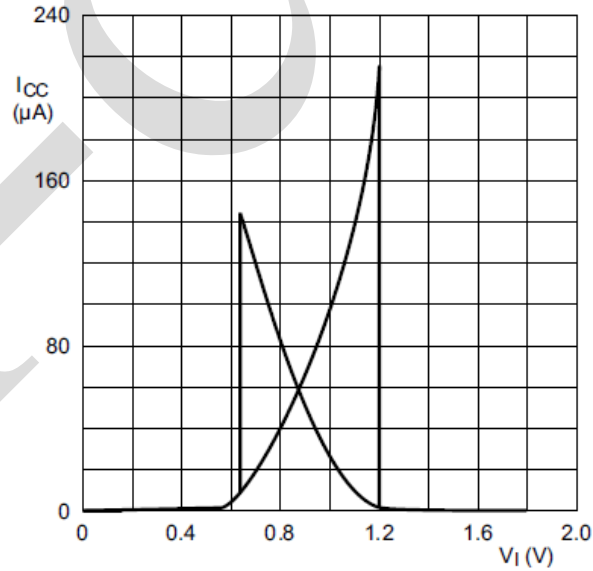


Figure 8. Typical transfer characteristics



4.4、Measurement Points

Supply voltage	Output	Input		
V_{CC}	V_M	V_M	V_I	$t_r=t_f$
0.8V to 3.6V	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$	V_{CC}	$\leq 3.0\text{ns}$

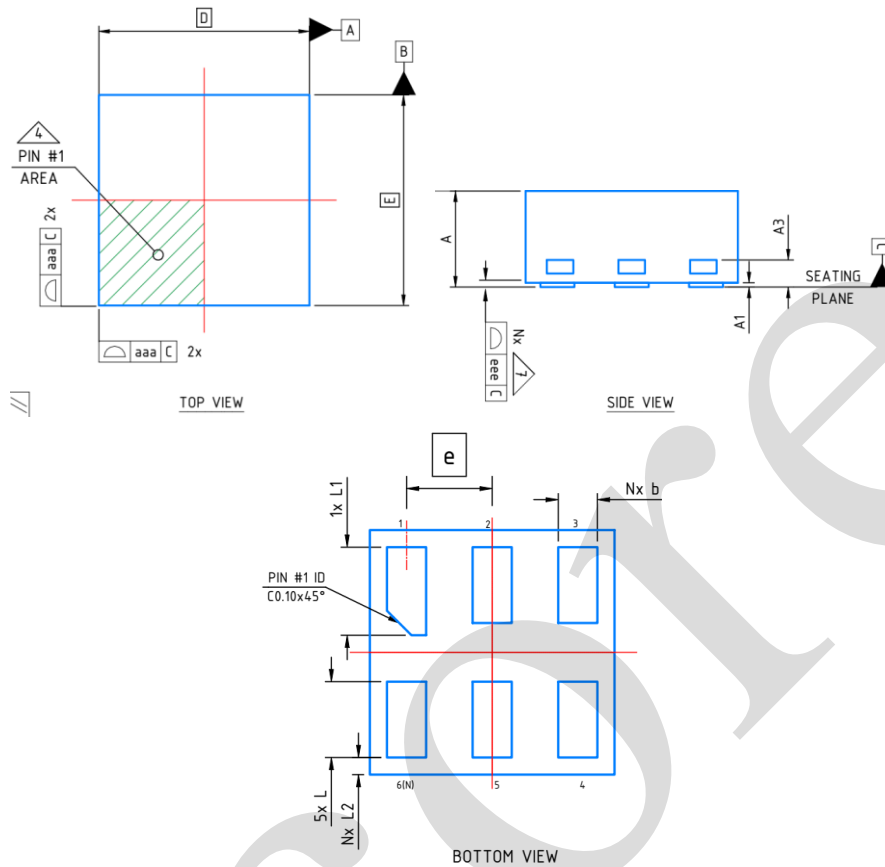
4.5、Test Data

Supply voltage	Load		V_{EXT}		
V_{CC}	C_L	R_L	t_{PLH}, t_{PHL}	t_{PZH}, t_{PHZ}	t_{PZL}, t_{PLZ}
0.8V to 3.6V	5pF, 10pF, 15pF and 30pF	5k Ω or 1M Ω	open	GND	$2 \times V_{CC}$



5、Package Information

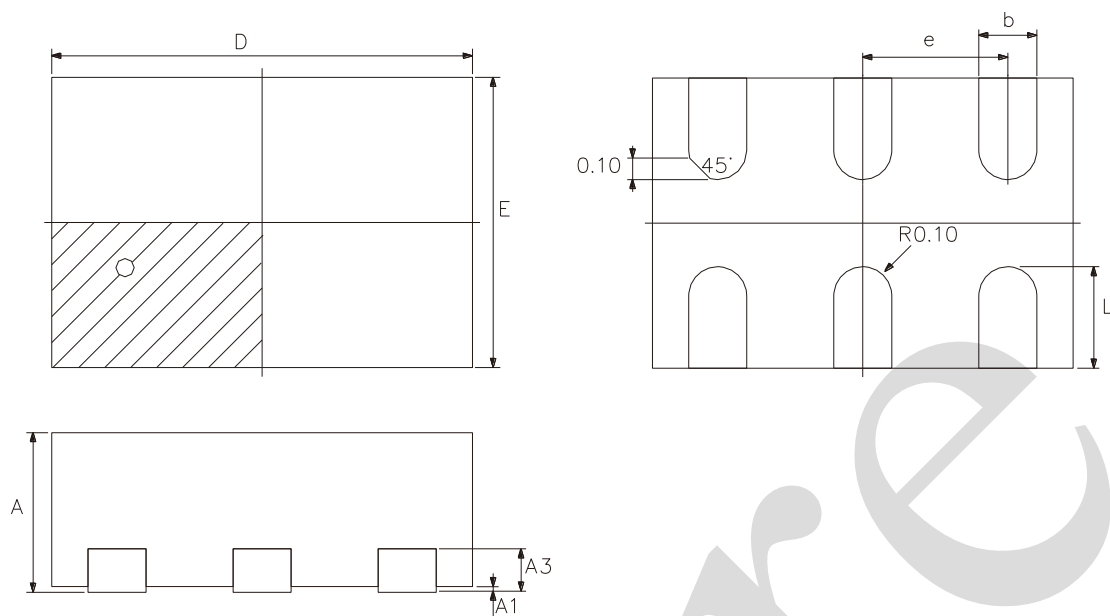
5.1、XSON6(1*1*0.45)-0.35



2025/03/B	Dimensions In Millimeters	
Symbol	Min	Max
A	0.32	0.50
A1	0	0.05
A3	0.1-0.13 REF	
b	0.10	0.21
D	1.00	
E	1.00	
e	0.35	
L	0.25	0.36
L1	0.30	0.41
L2	0.02	0.12



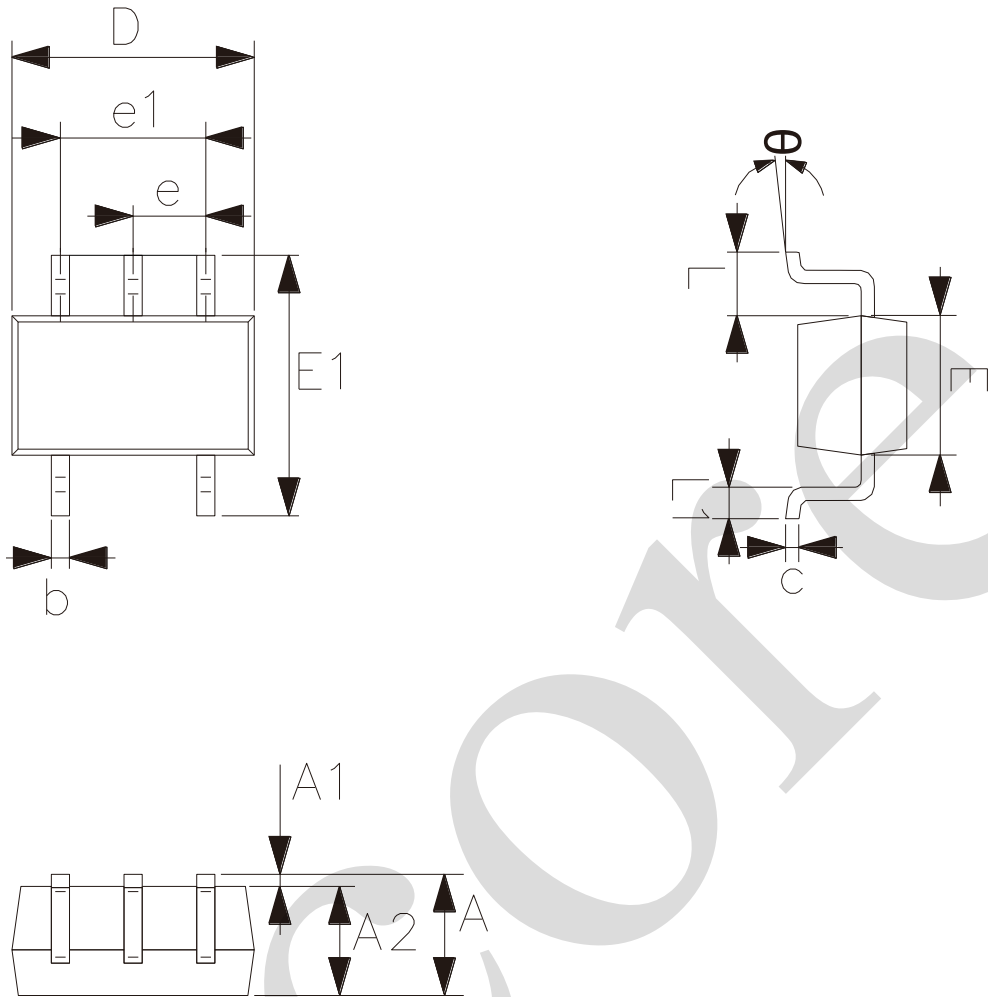
5.2、XSON6(1*1.45*0.55)-0.5



2023/12/A	Dimensions In Millimeters	
Symbol	Min	Max
A	0.51	0.60
A1	0.00	0.05
A3	0.15	
b	0.15	0.25
D	1.45	
E	1.00	
e	0.50	
L	0.25	0.45



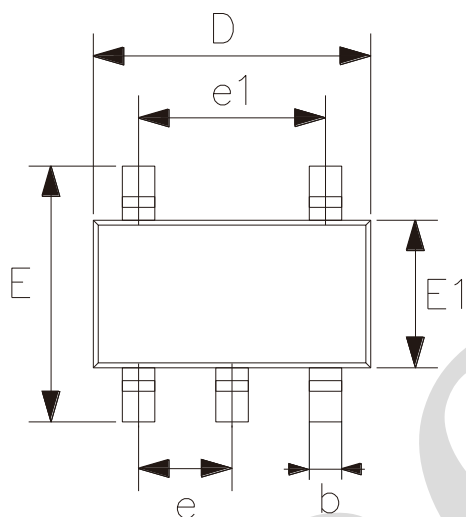
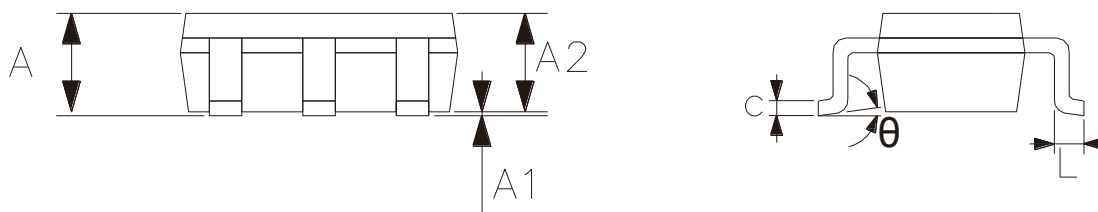
5.3、SOT353



2023/12/A Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.15	0.35
c	0.11	0.175
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.45
e	0.65	
e1	1.20	1.40
L	0.525	
L1	0.26	0.46
θ	0°	8°



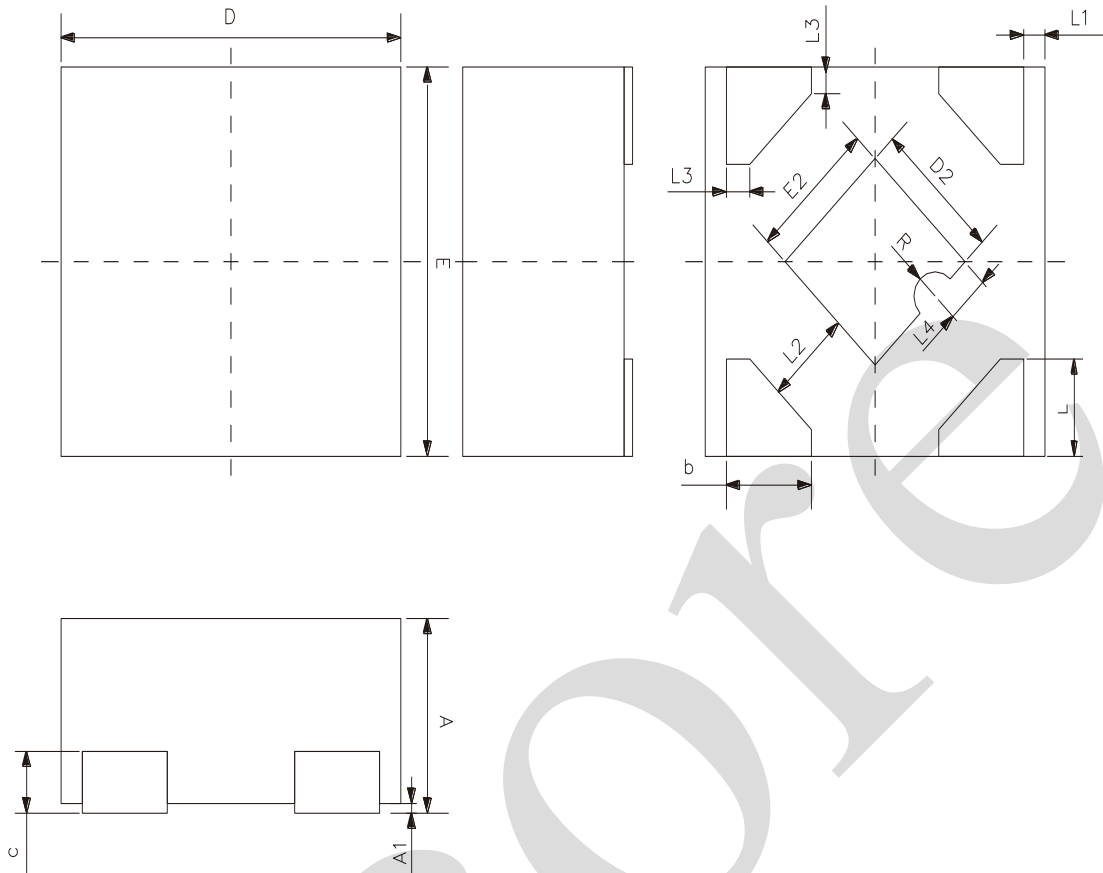
5.4、SOT23-5



2023/12/A	Dimensions In Millimeters	
Symbol	Min.	Max.
A	—	1.26
A1	0.00	0.12
A2	1.00	1.20
b	0.30	0.50
c	0.10	0.20
D	2.82	3.02
E	2.60	3.00
E1	1.50	1.70
e	0.95	
e1	1.80	2.00
L	0.30	0.60
θ	0°	8°



5.5、DFN4



2023/12/A	Dimensions In Millimeters	
Symbol	Min	Max
A	0.37	0.43
A1	0.00	0.05
b	0.15	0.25
c	0.127	
D	0.75	0.85
D2	0.20	0.40
E	0.75	0.85
E2	0.20	0.40
e	0.50	
L	0.15	0.25
L1	0.05	
L2	0.20	
L3	0.055	
L4	0.10	
R	0.05	



6、Statements And Notes

6.1、The name and content of Hazardous substances or Elements in the product

Part name	Hazardous substances or Elements									
	Lead and lead compounds	Mercury and mercury compounds	Cadmium and cadmium compounds	Hexavalent chromium compounds	Polybrominated biphenyls	Polybrominated biphenyl ethers	Dibutyl phthalate	Butylbenzyl phthalate	Di-2-ethylhexyl phthalate	Diisobutyl phthalate
Lead frame	○	○	○	○	○	○	○	○	○	○
Plastic resin	○	○	○	○	○	○	○	○	○	○
Chip	○	○	○	○	○	○	○	○	○	○
The lead	○	○	○	○	○	○	○	○	○	○
Plastic sheet installed	○	○	○	○	○	○	○	○	○	○
explanation	○: Indicates that the content of hazardous substances or elements in the detection limit of the following the SJ/T11363-2006 standard. ×: Indicates that the content of hazardous substances or elements exceeding the SJ/T11363-2006 Standard limit requirements.									

6.2、Notes

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