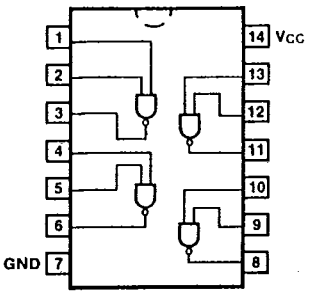
54/74132
54S/74S132
54LS/74LS132

QUAD 2-INPUT SCHMITT TRIGGER NAND GATE

CONNECTION DIAGRAM
PINOUT A



ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE V_{CC} = +5.0 V ±5%, T_A = 0°C to +70°C	MILITARY GRADE V_{CC} = +5.0 V ±10%, T_A = -55°C to +125°C	PKG TYPE
Plastic DIP (P)	A	74132PC, 74S132PC 74LS132PC		9A
Ceramic DIP (D)	A	74132DC, 74S132DC 74LS132DC	54132DM, 54S132DM 54LS132DM	6A
Flatpak (F)	A	74132FC, 74S132FC 74LS132FC	54132FM, 54S132FM 54LS132FM	3I

INPUT LOADING/FAN-OUT: See Section 3 for U.L. defintions

PINS	54/74 (U.L.) HIGH/LOW	54/74S (U.L.) HIGH/LOW	54/74LS (U.L.) HIGH/LOW
Inputs Outputs	1.0/0.75 20/10	1.25/1.25 25/12.5	0.5/0.25 10/5.0 (2.5)

DC AND AC CHARACTERISTICS: See Section 3*

SYMBOL	PARAMETER	54/74 Min	54/74 Max	54/74S Min	54/74S Max	54/74LS Min	54/74LS Max	UNITS	CONDITIONS
V_{T+}	Positive-going Threshold Voltage	1.5	2.0	1.6	1.9	1.4	1.9	V	V_{CC} = +5.0 V
V_{T-}	Negative-going Threshold Voltage	0.6	1.1	1.1	1.4	0.5	1.0	V	V_{CC} = +5.0 V
$V_{T+} - V_{T-}$	Hysteresis Voltage	0.4		0.2		0.4		V	V_{CC} = +5.0 V
I_{T+}	Input Current at Positive-going Threshold	-0.43**		-0.9 **		-0.14**		mA	V_{CC} = +5.0 V, V_{IN} = V_{T+}
I_{T-}	Input Current at Negative-going Threshold	-0.56**		-1.1 **		-0.18**		mA	V_{CC} = +5.0 V, V_{IN} = V_{T-}
I_{OS}	Output Short Circuit Current	-18	-55					mA	V_{CC} = Max, V_{OUT} = 0 V
I_{CCH} I_{CCL}	Power Supply Current	24 40		44 68		11 14		mA	V_{IN} = Gnd V_{IN} = Open V_{CC} = Max
t_{PLH} t_{PHL}	Propagation Delay	22 22		10.5 13		20 20		ns	Figs. 3-1, 3-4

*DC limits apply over operating temperature range; AC limits apply at T_A = +25°C and V_{CC} = +5.0 V. **Typical Value

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