

23

7-43-15

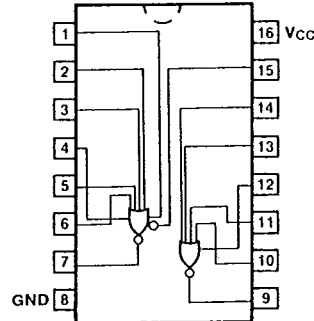
54/7423

EXPANDABLE DUAL 4-INPUT NOR GATE (With Strobe)

ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		$V_{CC} = +5.0\text{ V} \pm 5\%$, $T_A = 0^\circ\text{ C to } +70^\circ$	$V_{CC} = +5.0\text{ V} \pm 10\%$, $T_A = -55^\circ\text{ C to } +125^\circ\text{ C}$	
Plastic DIP (P)	A	7423PC		9B
Ceramic DIP (D)	A	7423DC	5423DM	6B
Flatpak (F)	A	7423FC	5423FM	4L

CONNECTION DIAGRAM PINOUT A



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

PINS	54/74 (U.L.) HIGH/LOW
Data Inputs	1.0/1.0
Strobe Inputs	4.0/4.0
Outputs	20/10

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE: Expander Inputs Open

SYMBOL	PARAMETER	54/74		UNITS	CONDITIONS	
		Min	Max		$V_{IN} = \text{Gnd}$	$V_{IN} = \text{Open}$
I_{CCH} I_{CCL}	Power Supply Current		16 19	mA	$V_{IN} = \text{Gnd}$ $V_{IN} = \text{Open}$	$V_{CC} = \text{Max}$

T-43-15

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE: Using Expander Inputs

SYMBOL	PARAMETER	54/74		UNITS	CONDITIONS	
		Min	Max			
V _{BE(Q)}	Base-Emitter Voltage of Output Transistor Q	XM	1.1	V	I ₁ = 0.41 mA	I _{OL} = 16 mA R ₁ = 0 Ω
		XC	1.0		I ₁ = 0.62 mA	
V _{OH}	Output HIGH Voltage	XM	2.4	V	I ₁ = 0.15 mA I ₂ = -0.15 mA	I _{OH} = -400 μA
		XC	2.4		I ₁ = 0.27 mA I ₂ = -0.27 mA	
V _{OL}	Output LOW Voltage	XM	0.4	V	I ₁ = 0.3 mA R ₁ = 138 Ω	I _{OL} = 16 mA
		XC	0.4		I ₁ = 0.43 mA R ₁ = 130 Ω	
I _x	Expander Current	XM	-2.9	V	V ₁ = 0.4 V, I _{OL} = 16 mA	
		XC	-3.1			

4

AC CHARACTERISTICS: V_{CC} = +5.0 V, T_A = +25° C (See Section 3 for waveforms and load configurations)

SYMBOL	PARAMETER	54/74		UNITS	CONDITIONS
		Min	Max		
t _{PLH} t _{PHL}	Propagation Delay		22 15	ns	Expander Pins Open Figs. 3-1, 3-4