

54LS/74LS33

QUAD 2-INPUT NOR BUFFER

(With Open-Collector Outputs)

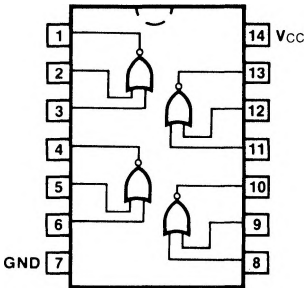
ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		V _{CC} = +5.0 V ±5%, T _A = 0°C to +70°C	V _{CC} = +5.0 V ±10%, T _A = -55°C to +125°C	
Plastic DIP (P)	A	74LS33PC		9A
Ceramic DIP (D)	A	74LS33DC	54LS33DM	6A
Flatpak (F)	A	74LS33FC	54LS33FM	3I

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

PINS	54/74LS (U.L.) HIGH/LOW
Inputs	0.5/0.25
Outputs	OC**/15 (7.5)

CONNECTION DIAGRAM
PINOUT A



DC AND AC CHARACTERISTICS: See Section 3*

SYMBOL	PARAMETER		54/74LS		UNITS	CONDITIONS	
			Min	Max			
VOL	Output LOW Voltage	XM, XC	0.4		V	IoL = 12 mA	VCC = Min
		XC	0.5			IoL = 24 mA	VIN = 2.0 V
IOH	Output HIGH Current		250		μA	VOH = 5.5 V, VCC = Min, VIN = VIL	
ICCH	Power Supply Current		3.6		mA	VIN = Gnd	VCC = Max
ICCL			13.8			VIN = Open	
tPLH	Propagation Delay		22		ns	Figs. 3-2, 3-4	
tPHL			22				

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