

74S133 13-INPUT NAND GATE

ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		$V_{CC} = +5.0 \text{ V} \pm 5\%$, $T_A = 0^\circ \text{C to } +70^\circ \text{C}$	$V_{CC} = +5.0 \text{ V} \pm 10\%$, $T_A = -55^\circ \text{C to } +125^\circ \text{C}$	
Plastic DIP (P)	A	74S133PC, 74LS133PC		9B
Ceramic DIP (D)	A	74S133DC, 74LS133DC	54S133DM, 54LS133DM	6B
Flatpak (F)	A	74S133FC, 74LS133FC	54S133FM, 54LS133FM	4L

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

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

DC AND AC CHARACTERISTICS: See Section 3*

SYMBOL	PARAMETER	54/74S		54/74LS		UNITS	CONDITIONS	
		Min	Max	Min	Max			
ICCH	Power Supply Current	5.0		0.5		mA	VIN = Gnd	VCC = Max
ICCL		10		1.1			VIN = Open	
tPLH	Propagation Delay	6.0		15		ns	Figs. 3-1, 3-4	
tPHL		7.0		38				

*DC limits apply over operating temperature range; AC limits apply at $T_A = +25^\circ \text{C}$ and $V_{CC} = +5.0 \text{ V}$.

CONNECTION DIAGRAM
PINOUT A

