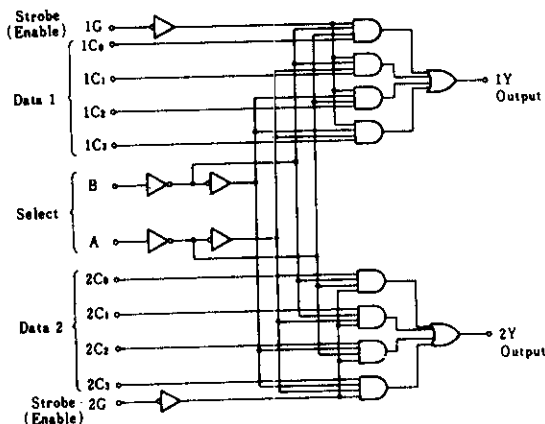


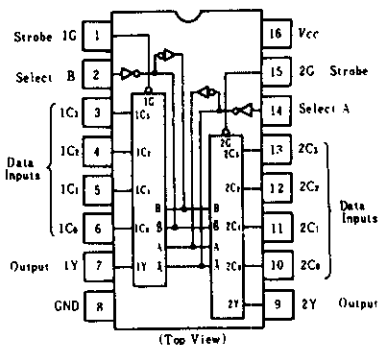
HD74LS153 • Dual 4-Line to 1-Line Data Selectors/Multiplexers

This data selector/multiplexer contains inverters and drivers to supply fully complementary, on-chip, binary decoding data selection to the AND-OR-INVERT gates. Separate strobe inputs are provided for each of the two four-line sections.

■ BLOCK DIAGRAM



■ PIN ARRANGEMENT



■ FUNCTION TABLE

Inputs							Outputs
Select		Data				Strobe	
B	A	C ₀	C ₁	C ₂	C ₃	G	Y
×	×	×	×	×	×	H	L
L	L	L	×	×	×	L	L
L	L	H	×	×	×	L	H
L	H	×	L	×	×	L	L
L	H	×	H	×	×	L	H
H	L	×	×	L	×	L	L
H	L	×	×	H	×	L	H
H	H	×	×	×	L	L	L
H	H	×	×	×	H	L	H

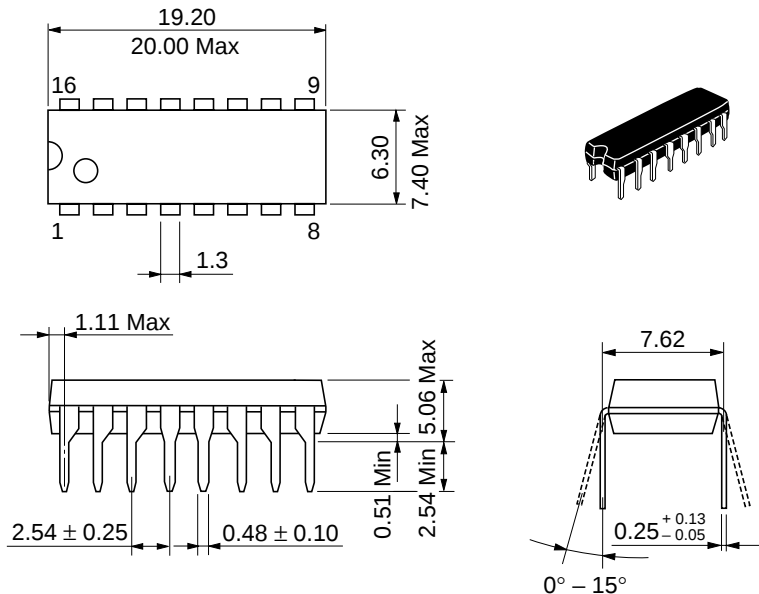
H; high level, L; low level, X; irrelevant

■ ELECTRICAL CHARACTERISTICS (Ta = -20 ~ +75°C)

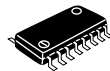
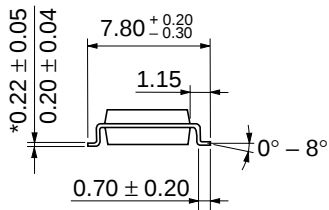
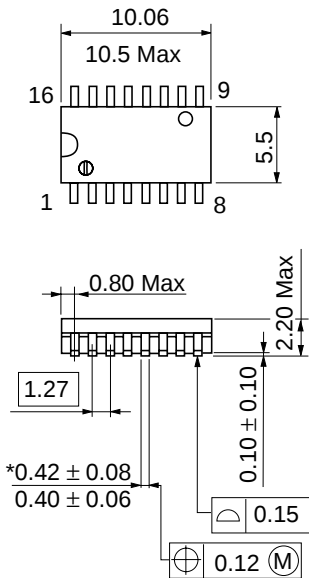
Item	Symbol	Test Conditions	min	typ*	max	Unit
Input voltage	V _{IH}		2.0	—	—	V
	V _{IL}		—	—	0.8	V
Output voltage	V _{OH}	V _{CC} =4.75V, V _{IH} =2V, V _{IL} =0.8V, I _{OH} =-400μA	2.7	—	—	V
	V _{OL}	V _{CC} =4.75V, V _{IH} =2V, I _{OL} =4mA	—	—	0.4	V
		V _{IL} =0.8V, I _{OL} =8mA	—	—	0.5	
Input current	I _{IH}	V _{CC} =5.25V, V _I =2.7V	—	—	20	μA
	I _{IL}	V _{CC} =5.25V, V _I =0.4V	—	—	-0.4	mA
	I _I	V _{CC} =5.25V, V _I =7V	—	—	0.1	mA
Short-circuit output current	I _{OS}	V _{CC} =5.25V	-20	—	-100	mA
Supply current**	I _{CC}	V _{CC} =5.25V	—	6.2	10	mA
Input clamp voltage	V _{IK}	V _{CC} =4.75V, I _{IN} =-18mA	—	—	-1.5	V

* V_{CC}=5V, Ta=25°C

** I_{CC} is measured with all outputs open and all inputs grounded.

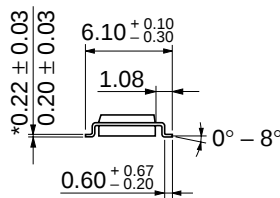
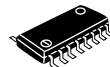
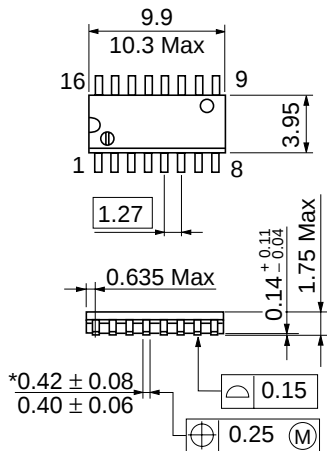


Hitachi Code	DP-16
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	1.07 g



Hitachi Code	FP-16DA
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.24 g

*Dimension including the plating thickness
Base material dimension



*Dimension including the plating thickness
Base material dimension

Hitachi Code	FP-16DN
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.15 g

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