INTEGRATED CIRCUITS

DATA SHEET

74LV4053

Triple 2-channel analog multiplexer/demultiplexer

Product specification
Supersedes data of 1997 Jul 15
IC24 Data Handbook





Triple 2-channel analog multiplexer/demultiplexer

74LV4053

FEATURES

- Optimized for low voltage applications: 1.0 to 6.0 V
- Accepts TTL input levels between V_{CC} = 2.7 V and V_{CC} = 3.6 V
- Low typ "ON" resistance:

100 Ω at V_{CC} – V_{EE} = 4.5 V 150 Ω at V_{CC} – V_{EE} = 3.0 V 240 Ω at V_{CC} – V_{EE} = 2.0 V

- Logic level translation: to enable 3 V logic to communicate with ± 3 V analog signals
- Typical "break before make" built in
- Output capability: non-standard
- I_{CC} category: MSI

DESCRIPTION

The 74LV4053 is a low-voltage CMOS device and is pin and function compatible with the 74HC/HCT4053.

The 74LV4053 is a triple 2-channel analog multiplexer/demultiplexer with a common enable input (E). Each multiplexer/demultiplexer has two independent inputs/outputs (nY $_0$ to nY $_1$), a common input/output (nZ) and three digital select inputs (S $_1$ to S $_3$).

With E LOW, one of the two switches is selected (low impedance ON-state) by S_1 to S_3 With \overline{E} HIGH, all switches are in the high impedance OFF-states, independent of S₁ and S₃.

V_{CC} and GND are the supply voltage pins for the digital control inputs $(S_1, \text{ to } S_3, \text{ and } \overline{E})$. The V_{CC} to GND ranges are 1.0 to 6.0 V. The analog inputs/outputs (nY₀, to nY₁, and nZ) can swing between V_{CC} as a positive limit and V_{EE} as a negative limit. V_{CC} - V_{EE} may not exceed 6.0 V. For operation as a digital multiplexer/demultiplexer, VEE is connected to GND (typically ground).

QUICK REFERENCE DATA

GND = 0 V; $T_{amh} = 25^{\circ}C$; $t_r = t_f \le 2.5 \text{ ns}$

SYMBOL	PARAMETER	CONDITIONS	TYPICAL	UNIT
t _{PZH} /t _{PZL}	Turn "ON" time E to V _{OS} S _n to V _{OS}	C_L = 15 pF R_L = 1K Ω V_{CC} = 3.3 V	16 20	ns
t _{PHZ} /t _{PLZ}	Turn "OFF" time E to V _{OS} S _n to V _{OS}		17 16	115
C _I	Input capacitance		3.5	
C _{PD}	Power dissipation capacitance per switch	See Notes 1 and 2	36	pF
C _S	Maximum switch capacitance independent (Y) common (Z)		5 8	Γ.

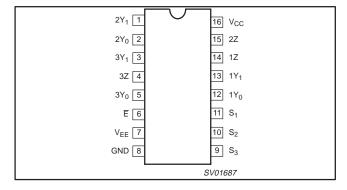
NOTES:

- C_{PD} is used to determine the dynamic power dissipation (P_D in μW)
 - $P_D = C_{PD} \times V_{CC}^2 \times f_i + \sum_i ((C_{L+} C_S) \times V_{CC}^2 \times f_o)$ where:
 - f_i = input frequency in MHz; C_L = output load capacity in pF;
 - f_0 = output frequency in MHz; C_S = maximum switch capacitance in pF;
- V_{CC} = supply voltage in V; $\sum ((C_L + C_S) \times V_{CC}^2 \times f_0)$ = sum of the outputs.
- The condition is $V_I = GND$ to V_{CC} .

ORDERING INFORMATION

PACKAGES	TEMPERATURE RANGE	OUTSIDE NORTH AMERICA	NORTH AMERICA	PKG. DWG. #
16-Pin Plastic DIL	-40°C to +125°C	74LV4053 N	74LV4053 N	SOT38-1
16-Pin Plastic SO	-40°C to +125°C	74LV4053 D	74LV4053 D	SOT109-1
16-Pin Plastic SSOP Type II	-40°C to +125°C	74LV4053 DB	74LV4053 DB	SOT338-1
16-Pin Plastic TSSOP Type I	-40°C to +125°C	74LV4053 PW	74LV4053PW DH	SOT403-1

PIN CONFIGURATION



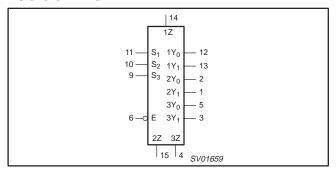
PIN DESCRIPTION

PIN NUMBER	SYMBOL	FUNCTION				
2, 1	2Y ₀ , 2Y ₁	Independent inputs/outputs				
5, 3	3Y ₀ , 3Y ₁	Independent inputs/outputs				
6	Ē	Enable input (active LOW)				
7	V _{EE}	Negative supply voltage				
8	GND	Ground (0 V)				
11, 10, 9	S ₁ to S ₃	Select inputs				
12, 13	1Y ₀ , 1Y ₁	Independent inputs/outputs				
14, 15, 4	1Z to 3Z	Common inputs/outputs				
16	V _{CC}	Positive supply voltage				

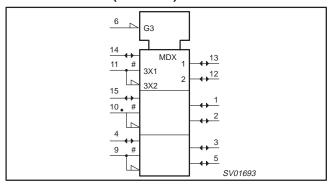
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LOGIC SYMBOL



LOGIC SYMBOL (IEEE/IEC)



FUNCTION TABLE

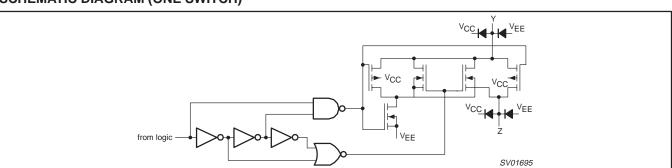
INP	INPUTS					
Ē	Sn	ON				
L	L	$nY_0 - nZ$				
L	Н	$nY_1 - nZ$				
Н	X	None				

NOTES:

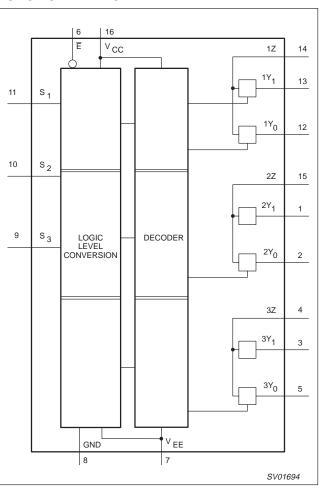
H = HIGH voltage level L = LOW voltage level

X = don't care

SCHEMATIC DIAGRAM (ONE SWITCH)



FUNCTIONAL DIAGRAM



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ABSOLUTE MAXIMUM RATINGS^{1, 2}

In accordance with the Absolute Maximum Rating System (IEC 134).

Voltages are referenced to GND (ground = 0 V).

SYMBOL	PARAMETER	CONDITIONS	RATING	UNIT
V _{CC}	DC supply voltage		-0.5 to +7.0	V
± I _{IK}	DC input diode current	$V_{I} < -0.5 \text{ or } V_{I} > V_{CC} + 0.5 \text{ V}$	20	mA
± I _{SK}	DC switch diode current	$V_{O} < -0.5 \text{ or } V_{O} > V_{CC} + 0.5 \text{ V}$	20	mA
±IS	DC switch current	$-0.5 \text{ V} < \text{V}_{\text{S}} < \text{V}_{\text{CC}} + 0.5 \text{ V}$	25	mA
T _{stg}	Storage temperature range		-65 to +150	°C
P _{TOT}	Power dissipation per package – plastic DIL – plastic mini-pack (SO) – plastic shrink mini-pack (SSOP and TSSOP)	for temperature range: -40 to +125°C above +70°C derate linearly with 12 mW/K above +70°C derate linearly with 8 mW/K above +60°C derate linearly with 5.5 mW/K	750 500 400	mW

NOTES:

RECOMMENDED OPERATING CONDITIONS

SYMBOL	PARAMETER	PARAMETER CONDITIONS				UNIT
V _{CC}	DC supply voltage	See Note 1 and Figure 5 1.0				V
V _I	Input voltage		0	_	V _{CC}	V
Vo	Output voltage		0	-	V _{CC}	V
T _{amb}	Operating ambient temperature range in free air	See DC and AC characteristics	-40 -40		+85 +125	°C
t _r , t _f	Input rise and fall times	$V_{CC} = 1.0 \text{ V to } 2.0 \text{ V}$ $V_{CC} = 2.0 \text{ V to } 2.7 \text{ V}$ $V_{CC} = 2.7 \text{ V to } 6.0 \text{ V}$		- -	500 200 100	ns/V

NOTE

Stresses beyond those listed may cause permanent damage to the device. These are stress ratings only and functional operation of the
device at these or any other conditions beyond those indicated under "recommended operating conditions" is not implied. Exposure to
absolute-maximum-rated conditions for extended periods may affect device reliability.

The input and output voltage ratings may be exceeded if the input and output current ratings are observed.

^{1.} The LV is guaranteed to function down to $V_{CC} = 1.0 \text{V}$ (input levels GND or V_{CC}); DC characteristics are guaranteed from $V_{CC} = 1.2 \text{V}$ to $V_{CC} = 6.0 \text{V}$.

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DC ELECTRICAL CHARACTERISTICS

Over recommended operating conditions, voltages are referenced to GND (ground = 0 V)

						LIMITS			╛
SYMBOL	PARAMETER	TEST CO	NDITIONS	-4	0°C to +8	5°C	-40°C t	+125°C	רואט
			MIN	TYP ¹	MAX	MIN	MAX		
		V _{CC} = 1.2 V		0.9			0.9		
	LICH lovel Input	$V_{CC} = 2.0 \text{ V}$		1.4			1.4		
V_{IH}	HIGH level Input voltage	$V_{CC} = 2.7 \text{ to } 3.6 \text{ V}$	2.0			2.0		V	
		V _{CC} = 4.5 V	3.15			3.15		╛	
		$V_{CC} = 6.0 \text{ V}$		4.20			4.20		
		V _{CC} = 1.2 V				0.3		0.3	_
	LOW level Input	V _{CC} = 2.0 V				0.6		0.6	┨
V_{IL}	voltage	$V_{CC} = 2.7 \text{ to } 3.6 \text{ V}$				0.8		0.8	-
		V _{CC} = 4.5 V				1.35		1.35	4
		V _{CC} = 6.0 V				1.80		1.80	₩
$\pm l_1$	Input leakage	V _{CC} = 3.6	$V_1 = V_{CC}$ or GND		+	1.0		1.0	μΑ
	current	$V_{CC} = 6.0$			-	2.0		2.0	+-
±Is	Analog switch OFF-state current	$V_{CC} = 3.6$	$V_I = V_{IH} \text{ or } V_{IL}$			1.0		1.0	μΑ
±iS	per channel	V _{CC} = 6.0	IV _S I = V _{CC} - GND (See Figure 2)			2.0		2.0	μΑ
	Analog switch	V _{CC} = 3.6	$V_I = V_{IH} \text{ or } V_{IL}$			1.0		1.0	μΑ
±IS	ON-state current	V _{CC} = 6.0	V _S I = V _{CC} - GND (See Figure 3)			2.0		2.0] μΑ
	Quiescent supply	V _{CC} = 3.6 V	$V_I = V_{CC}$ or GND			20.0		40	
Icc	current \	V _{CC} = 6.0 V	V_{IS} = GND or V_{CC} ; V_{OS} = V_{CC} or GND			40.0		80	μΑ
Δl _{CC}	Additional quiescent supply current per input	V _{CC} = 2.7 to 3.6 V	$V_{I} = V_{CC} - 0.6 \text{ V}$			500		850	μА
		V _{CC} = 1.2 V	$\begin{split} I_S &= 100 \; _{\mu}A; \\ V_{IS} &= V_{CC} \; to \; GND; \\ V_I &= V_{IH} \; or \; V_{IL} \end{split}$						
	ON-resistance	V _{CC} = 2.0 V			180	365		435	7
R_{ON}	(peak)	V _{CC} = 2.7 V	I _S = 1000 _μ A;		115	225		270	Ω
		$V_{CC} = 3.0 \text{ to } 3.6 \text{ V}$	$V_{IS} = V_{CC}$ to GND;		100	200		245	1
		$V_{CC} = 4.5 \text{ V}$	$V_{I} = V_{IH}$ or V_{IL}		75	150		180]
		$V_{CC} = 6.0 \text{ V}$			70	140		165	
		V _{CC} = 1.2 V	$I_S = 100 \mu A;$ $V_{IS} = GND;$ $V_I = V_{IH} \text{ or } V_{IL}$		250				
	ON-resistance	V _{CC} = 2.0 V			120	280		325	7
R_{ON}	(rail)	V _{CC} = 2.7 V	I _S = 1000 _μ A;		75	170		195	Ω
	[$V_{CC} = 3.0 \text{ to } 3.6 \text{ V}$	$V_{IS} = GND;$ $V_{I} = V_{IH} \text{ or } V_{IL}$		70	155		180	7
		V _{CC} = 4.5 V	$\nabla V_{I} = V_{IH} \text{ or } V_{IL}$		50	120		135	7
		V _{CC} = 6.0 V	1		45	105		120	7
		V _{CC} = 1.2 V	$V_I = V_{IH} \text{ or } V_{IL};$ $I_S = 100 _{\mu}A;$ $V_{IS} = V_{CC}$		350				
	ON-resistance	V _{CC} = 2.0 V			170	340		400	7
R_{ON}	(rail)	V _{CC} = 2.7 V	$V_{I} = V_{IH} \text{ or } V_{IL};$		105	210		250	Ω
	,	$V_{CC} = 3.0 \text{ to } 3.6 \text{ V}$	$I_S = 1000 \mu A;$		95	190		225	
		V _{CC} = 4.5 V	$V_{IS} = V_{CC}$		70	140		165	
		V _{CC} = 6.0 V	1		65	125		150	

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DC ELECTRICAL CHARACTERISTICS (Continued)

			LIMITS						
SYMBOL	PARAMETER	TEST CON	-40	°C to +8	5°C	-40°C to	UNIT		
				MIN	TYP ¹	MAX	MIN	MAX	1 1
		$V_{CC} = 1.2 \text{ V}$							
	Maximum variation	V _{CC} = 2.0 V			5				1 1
ΔR_{ON}	of ON-resistance	$V_{CC} = 2.7 \text{ V}$	$V_I = V_{IH}$ or V_{IL} ;		4				$\mid_{\Omega}\mid$
ANON	between any two	$V_{CC} = 3.0 \text{ to } 3.6 \text{ V}$	$V_{IS} = V_{CC}$ to GND		4				
	channels	V _{CC} = 4.5 V			3				
		$V_{CC} = 6.0 \text{ V}$			2				

NOTES:

- 1. All typical values are measured at $T_{amb} = 25$ °C.
- 2. At supply voltages approaching 1.2 V, the analog switch ON-resistance becomes extremely non-linear. Therefore, it is recommended that these devices be used to transmit digital signals only, when using these supply voltages.

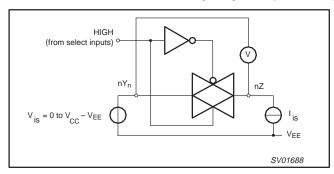


Figure 1. Test circuit for measuring ON-resistance (R_{ON}).

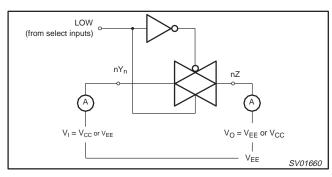


Figure 2. Test circuit for measuring OFF-state current.

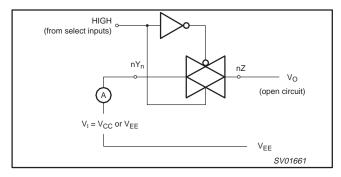


Figure 3. Test circuit for measuring ON-state current.

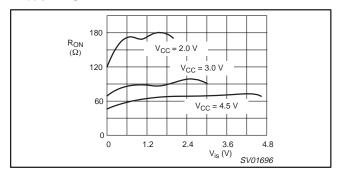


Figure 4. Typical ON-resistance (R_{on}) as a function of input voltage (V_{is}) for V_{is} = 0 to V_{CC} – V_{EE} .

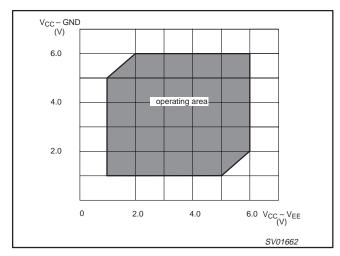


Figure 5. Guaranteed operating area as a function of the supply voltages.

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AC CHARACTERISTICS

 $GND = 0 \text{ V; } t_r = t_f \leq 2.5 \text{ns; } C_L = 50 \text{pF}$

		CONDIT	ION			LIMITS			
SYMBOL	PARAMETER	CONDIT	1014	_	40 to +85 °	°C	-40 to	+125 °C	UNIT
		V _{CC} (V)	OTHER	MIN	TYP ¹	MAX	MIN	MAX	
		1.2			25				
		2.0			9	17		20	
	Propagation delay V _{is} to V _{os}	2.7	R _L = ∞;		6	13		15	
t _{PHL} /t _{PLH}		3.0 to 3.6	C _L = 50 pF Figure 12		5 ²	10		12	ns
		4.5	1 1941 1		4	9		10	
		6.0			3	7		8	
		1.2			100				
		2.0	$R_L = 1k\Omega;$		34	65		77	
t _{PZH} /t _{PZL}	Turn-on time $\overline{E}_{to} V_{os}$	2.7	$C_L = 50 \text{ pF}$		25	48		56	ns
		3.0 to 3.6	Figures 13		19 ²	38		45	
		4.5	and 1		17	32		38	
		6.0			13	25		29	
		1.2			125				ns
	Turn-on time S _n to V _{os}	2.0	$R_L = 1k\Omega$		43	82		97	
. ,		2.7	$C_L = 50 \text{ pF}$ Figures 13		31	60		71	
t _{PZH} /t _{PZL}		3.0 to 3.6			24 ²	48		57	
		4.5	and 1		21	41		48	
		6.0			16	31		37	
		1.2			95				
		2.0	$R_L = 1k\Omega$		34	61		73	
	Turn-off time	2.7	$C_L = 50 \text{ pF}$		26	46		54	
t _{PHZ} /t _{PLZ}	$\overline{E}_{to}V_{os}$	3.0 to 3.6	Figures 13		20 ²	37		44	ns
		4.5	and 1		18	32		38	
		6.0			15	25		30	
		1.2			90				
		2.0	$R_L = 1k\Omega$		32	59		70	
t/t	Turn-off time	2.7	$C_L = 50 \text{ pF}$		24	44		52	ns
t _{PHZ} /t _{PLZ}	Sn to V _{os}	3.0 to 3.6	Figures 13		19 ²	36		42	
		4.5	and 1		17	31		36	
		6.0	\neg		14	24		28	

Unless otherwise stated, all typical values are measured at T_{amb} = 25°C
 Typical values are measured at V_{CC} = 3.3 V.

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ADDITIONAL AC CHARACTERISTICS

Recommended conditions and typical values GND = 0 V; $t_r = t_f \! \leq \! 2.5 ns$

SYMBOL	PARAMETER	TYP.	UNIT	V _{CC} (V)	V _{is(p-p)} (V)	CONDITIONS	
	Sine-wave distortion f = 1 kHz		%	3.0 6.0	2.75 5.50	$R_L = 10 \text{ k}\Omega; C_L = 50 \text{ pf}$ Figures 9 and 10	
	Sine-wave distortion f = 10 kHz	2.40 1.20	%	3.0 6.0			
	Switch "OFF" signal feed through	-50 -50	dB	3.0 6.0	Note 1	$R_L = 600 \ \Omega$; $C_L = 50 \ pf$; $f = 1 \ MHz$ Figures 5 and 11	
	Crosstalk between any two switches/multiplexers	-60 -60	dB	3.0 6.0	Note 1	$R_L = 600 \Omega$; $C_L = 50 \text{ pf}$; $f = 1 \text{ MHz}$ Figure 8	
V _(p-p)	Crosstalk voltage between enable or address input to any switch (peak-to-peak value)	110 120	mV	3.0 6.0		$R_L = 600 \ \Omega$; $C_L = 50 \ pf$; $f = 1 \ MHz$ (S_n or E , square wave between V_{CC} and $GND \ t_r = t_f = 6 \ ns$) Figure 8	
f _{max}	Minimum frequency response (–3 dB)	180 200	MHz	3.0 6.0	Note 2	$R_L = 50 \Omega$; $C_L = 50 pF$ Figures 6, 8 and 9	
C _S	Maximum switch capacitance	5	pf				

GENERAL NOTES:

 V_{is} is the input voltage at nY_n or nZ terminal, whichever is assigned as an input.

 V_{OS} is the output voltage at nY_n or nZ terminal, whichever is assigned as an output.

NOTES:

- 1. Adjust input voltage V_{is} is 0 dBm level (0 dBm = 1 mW into 600 Ω).
- 2. Adjust input voltage V_{is} is 0 dBm level at V_{OS} for 1 MHz (0 dBm = 1 mW into 50 Ω).

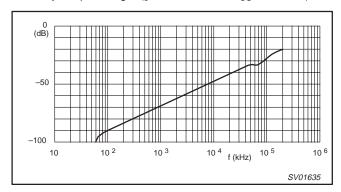


Figure 6. Typical switch "OFF" signal feed-through as a function of frequency.

Figure 7. Typical frequency response.

NOTES TO FIGURES 6 AND 7:

Test conditions: V_{CC} = 3.0 V; GND = 0 V; V_{EE} = -3.0V; R_L = 50 Ω ; R_{SOURCE} = 1k Ω .

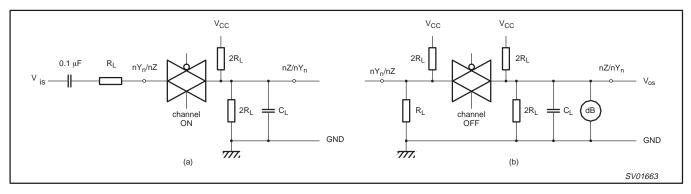


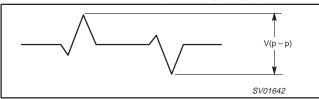
Figure 8. Test circuit for measuring crosstalk between any two switches. (a) channel ON condition; (b) channel OFF condition.

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NOTE TO FIGURE 8:

The crosstalk is defined as follows (oscilloscope output):



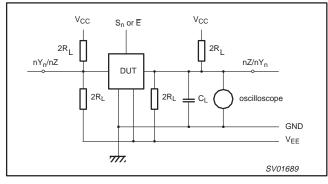


Figure 9. Test circuit for measuring crosstalk between control and any switch.

NOTE TO FIGURE 9:

Adjust input voltage to obtain 0 dBm at V_{OS} when F_{in} = 1 MHz. After set-up frequency of f_{in} is increased to obtain a reading of –3 dB at V_{OS} .

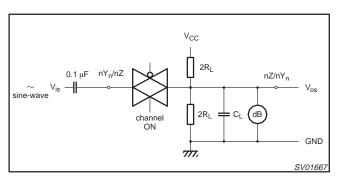


Figure 10. Test circuit for measuring minimum frequency response.

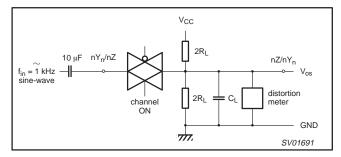


Figure 11. Test circuit for measuring sine-wave distortion.

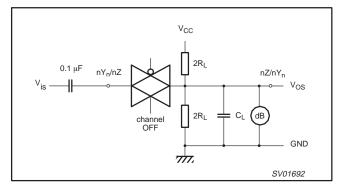


Figure 12. Test circuit for measuring switch "OFF" signal feed-through.

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WAVEFORMS

 $V_{M} = 1.5 \text{ V at } 2.7 \text{ V} \le V_{CC} \le 3.6 \text{ V}$

 $V_{M} = 0.5 \times V_{CC}$ at 2.7 V > $V_{CC} > 3.6$ V

 V_{OL}^{m} and V_{OH} are the typical output voltage drop that occur with the output load

 $V_x = V_{OL} + 0.3 \text{ V at } 2.7 \text{ V} \le V_{CC} \le 3.6 \text{ V}$

 $\begin{array}{l} V_X = V_{OL} + 0.1 \times V_{CC} \text{ at } 2.7 \text{ V} > V_{CC} > 3.6 \text{ V} \\ V_Y = V_{OH} - 0.3 \text{ V} \text{ at } 2.7 \text{ V} > V_{CC} \leq 3.6 \text{ V} \\ V_Y = V_{OH} - 0.3 \text{ V} \text{ at } 2.7 \text{ V} \leq V_{CC} \leq 3.6 \text{ V} \\ V_Y = V_{OH} - 0.1 \times V_{CC} \text{ at } 2.7 \text{ V} > V_{CC} > 3.6 \text{ V} \end{array}$

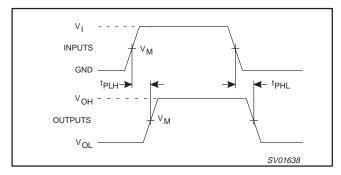


Figure 13. Input (V_{is}) to output (V_{os}) propagation delays.

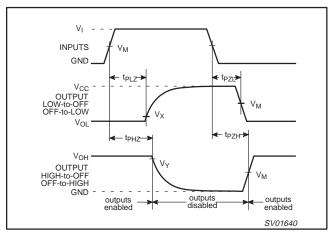


Figure 14. Turn-on and turn-off times for the inputs (S_n, \overline{E}) to the output (V_{os}) .

TEST CIRCUIT

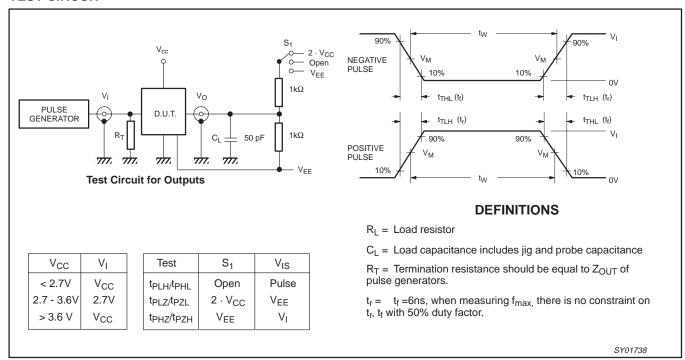


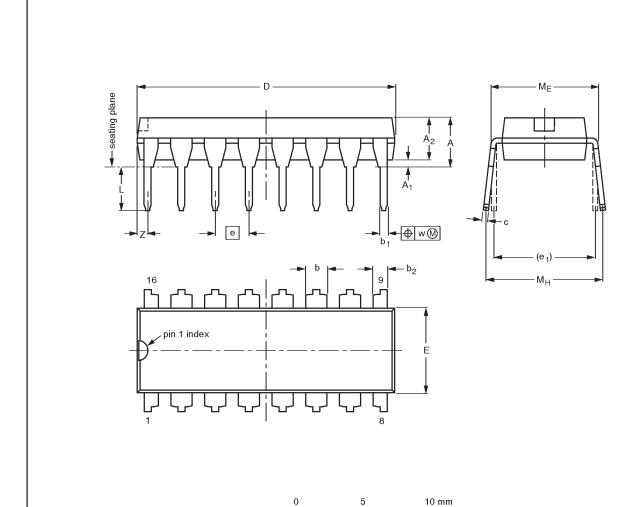
Figure 15. Load circuitry for switching times.

Triple 2-channel analog multiplexer/demultiplexer

74LV4053

DIP16: plastic dual in-line package; 16 leads (300 mil)

SOT38-4



DIMENSIONS (inch dimensions are derived from the original mm dimensions)

UNIT	A max.	A ₁ min.	A ₂ max.	b	b ₁	b ₂	C	D ⁽¹⁾	E ⁽¹⁾	е	e ₁	L	ME	Мн	w	Z ⁽¹⁾ max.
mm	4.2	0.51	3.2	1.73 1.30	0.53 0.38	1.25 0.85	0.36 0.23	19.50 18.55	6.48 6.20	2.54	7.62	3.60 3.05	8.25 7.80	10.0 8.3	0.254	0.76
inches	0.17	0.020	0.13	0.068 0.051	0.021 0.015	0.049 0.033	0.014 0.009	0.77 0.73	0.26 0.24	0.10	0.30	0.14 0.12	0.32 0.31	0.39 0.33	0.01	0.030

scale

Note

1. Plastic or metal protrusions of 0.25 mm maximum per side are not included.

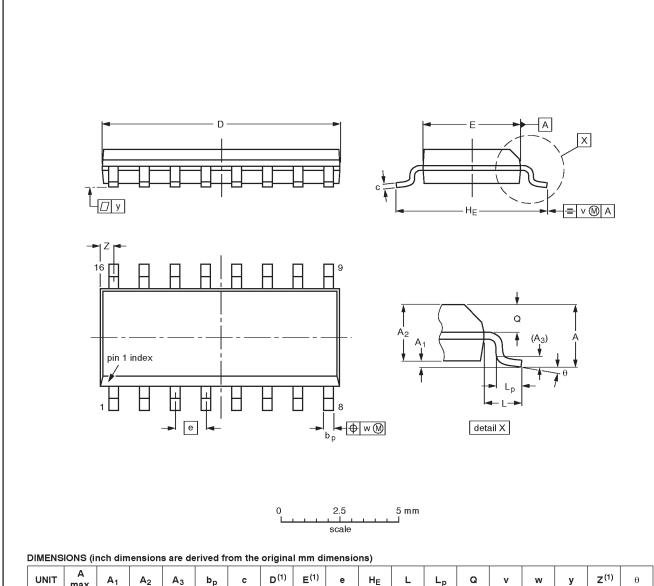
OUTLINE		REFER	RENCES	EUROPEAN	ISSUE DATE		
VERSION	IEC	JEDEC	EIAJ		PROJECTION	ISSUE DATE	
SOT38-4					□ •	92-11-17 95-01-14	

Triple 2-channel analog multiplexer/demultiplexer

74LV4053

SO16: plastic small outline package; 16 leads; body width 3.9 mm

SOT109-1



							_			-								
UNIT	. A max.	A ₁	A ₂	A ₃	bp	С	D ⁽¹⁾	E ⁽¹⁾	е	HE	L	Lp	Ø	v	w	у	Z ⁽¹⁾	θ
mm	1.75	0.25 0.10	1.45 1.25	0.25	0.49 0.36	0.25 0.19	10.0 9.8	4.0 3.8	1.27	6.2 5.8	1.05	1.0 0.4	0.7 0.6	0.25	0.25	0.1	0.7 0.3	8°
inche	s 0.069	0.0098 0.0039		0.01		0.0098 0.0075	0.39 0.38	0.16 0.15	0.050	0.24 0.23	0.041	0.039 0.016		0.01	0.01	0.004	0.028 0.012	0°

Note

1. Plastic or metal protrusions of 0.15 mm maximum per side are not included.

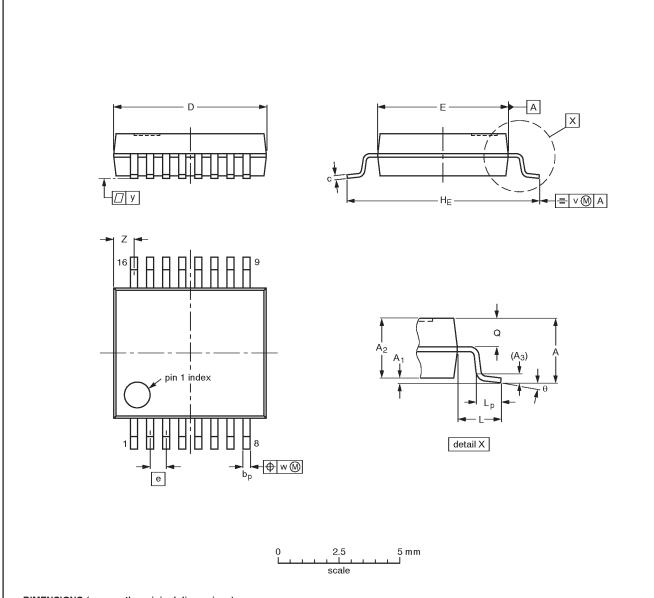
OUTLINE		REFER	EUROPEAN	ISSUE DATE				
VERSION	IEC	JEDEC	EIAJ		PROJECTION	ISSUE DATE		
SOT109-1	076E07\$	MS-012AC				91-08-13 95-01-23		

Triple 2-channel analog multiplexer/demultiplexer

74LV4053

SSOP16: plastic shrink small outline package; 16 leads; body width 5.3 mm

SOT338-1



DIMENSIONS (mm are the original dimensions)

UNIT	A max.	A ₁	A ₂	A ₃	рb	c	D ⁽¹⁾	E ⁽¹⁾	е	HE	L	Lp	Q	v	w	у	Z ⁽¹⁾	θ
mm	2.0	0.21 0.05	1.80 1.65	0.25	0.38 0.25	0.20 0.09	6.4 6.0	5.4 5.2	0.65	7.9 7.6	1.25	1.03 0.63	0.9 0.7	0.2	0.13	0.1	1.00 0.55	8° 0°

Note

1. Plastic or metal protrusions of 0.25 mm maximum per side are not included.

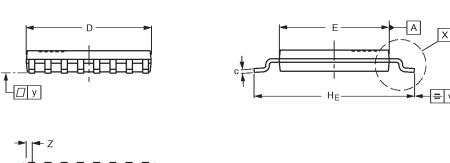
OUTLINE		REFER	EUROPEAN	ISSUE DATE			
VERSION	IEC	JEDEC	EIAJ		PROJECTION	ISSUE DATE	
SOT338-1		MO-150AC				94-01-14 95-02-04	

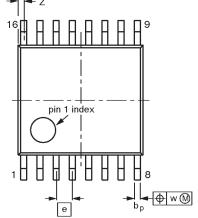
Triple 2-channel analog multiplexer/demultiplexer

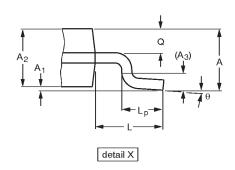
74LV4053

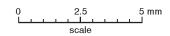
TSSOP16: plastic thin shrink small outline package; 16 leads; body width 4.4 mm

SOT403-1









DIMENSIONS (mm are the original dimensions)

UNIT	A max.	Α1	A ₂	A ₃	bр	c	D ⁽¹⁾	E ⁽²⁾	Φ	HE	L	Lp	Ø	v	w	у	Z ⁽¹⁾	θ
mm	1.10	0.15 0.05	0.95 0.80	0.25	0.30 0.19	0.2 0.1	5.1 4.9	4.5 4.3	0.65	6.6 6.2	1.0	0.75 0.50	0.4 0.3	0.2	0.13	0.1	0.40 0.06	8° 0°

Notes

- 1. Plastic or metal protrusions of 0.15 mm maximum per side are not included.
- 2. Plastic interlead protrusions of 0.25 mm maximum per side are not included.

OUTLINE		REFER	EUROPEAN	ISSUE DATE				
VERSION	IEC	JEDEC	EIAJ		PROJECTION	ISSUE DATE		
SOT403-1		MO-153				-94-07-12 95-04-04		

Triple 2-channel analog multiplexer/demultiplexer

74LV4053

NOTES

Triple 2-channel analog multiplexer/demultiplexer

74LV4053

	DEFINITIONS								
Data Sheet Identification	Product Status	Definition							
Objective Specification	Formative or in Design	This data sheet contains the design target or goal specifications for product development. Specifications may change in any manner without notice.							
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