

SANYO	No.1054B	LA7019
		Monolithic Linear IC Electronic Switch for Use in VTR Applications

Features

- Wide input dynamic range
- Low distortion
- Good frequency characteristic

Maximum Ratings at Ta=25°C

Maximum Supply Voltage	V _{CC} max		15	V
Allowable Power Dissipation	Pd max	Ta ≤ 65°C	300	mW
Operating Temperature	Topg		-20 to +65	°C
Storage Temperature	Tstg		-40 to +125	°C

Operating Characteristics at Ta=25°C, V_{CC}=12V

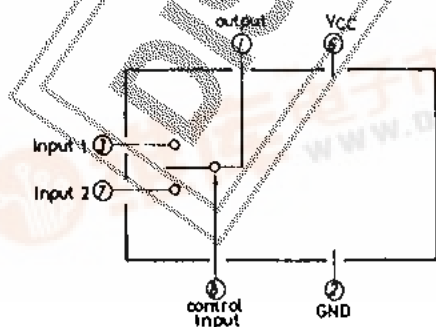
			min	typ	max	unit
Circuit Current	I _D			9.3	12.5	mA
Total Harmonic Distortion	THD	*R _g =600Ω, 4.5Vp-p, f=1kHz, R _L =∞		0.007	0.1	%
Noise	e _n	*R _g =600Ω, f=20Hz to 20kHz, R _L =∞		-93	-80	dBs
Crosstalk	I _{sl}	*Input A: R _g =50Ω, f=3.58MHz 2Vp-p; Input B: R _g =1kΩ	46	60		dB
Pedestal	ΔV _{ped}	V _g =2.2 to 3.0V	-100	0	+100	mV
Second Harmonic		R _g =50Ω, f=1MHz, 4.0Vp-p, R _L =∞	46	55		dB
Third Harmonic		R _g =50Ω, f=1MHz, 4.0Vp-p, R _L =∞	46	52		dB
Control, Threshold Voltage	V _{8S}		2.2	2.6	3.0	V
Pin Voltage (pin 1)	V ₁			6.9		V
Pin Voltage (pin 3)	V ₃	V ₈ =2.0V		7.6		V
Pin Voltage (pin 3)	V ₃	V ₈ =3.0V		7.6		V
Pin Voltage (pin 7)	V ₇	V ₈ =3.0V		7.6		V
Pin Voltage (pin 7)	V ₇	V ₈ =2.2V		7.6		V

Note) * : Test for input 1 and input 2.

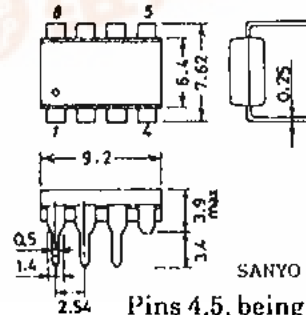
For input 1 test, V_{cont} (pin 8 voltage) is 2.0V.

For input 2 test, V_{cont} is 3.0V.

Equivalent Circuit Block Diagram



Case Outline 3030A-D8C2IC (unit: mm)

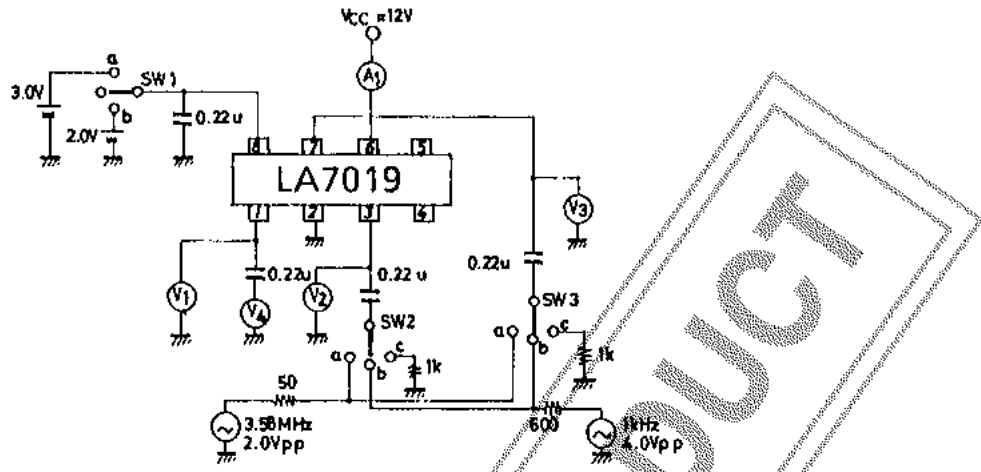


Pins 4,5, being not used, are cut.



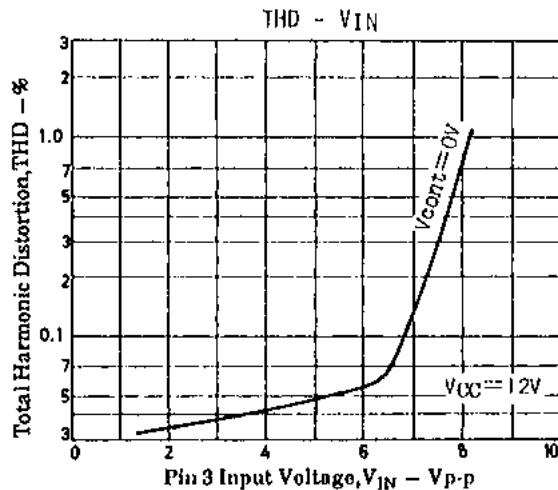
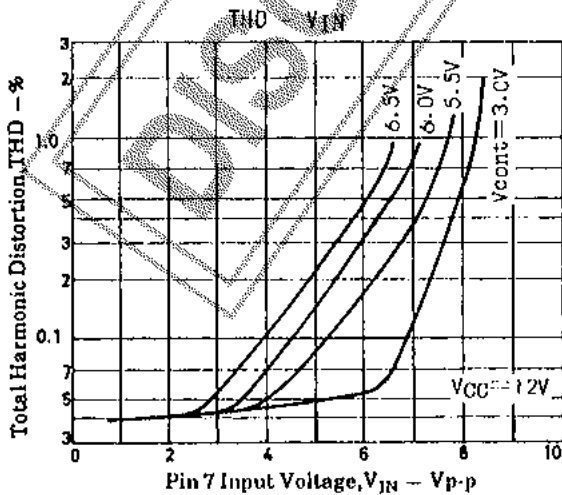
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Test Circuit

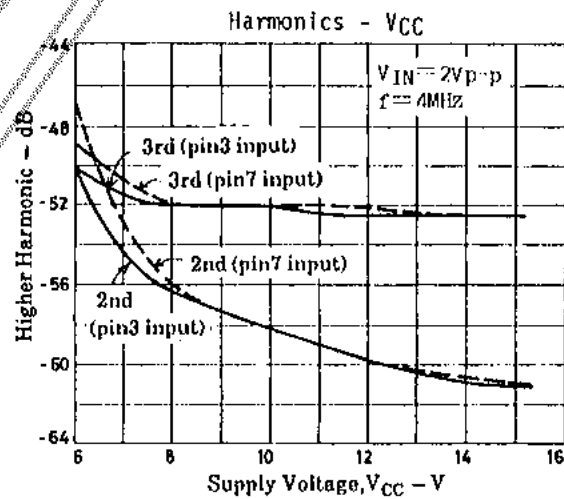
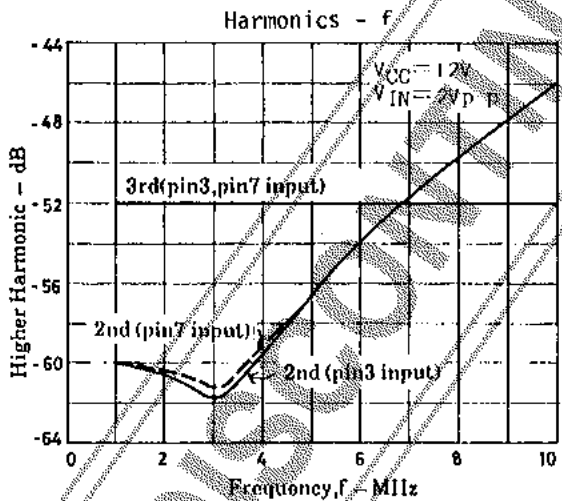
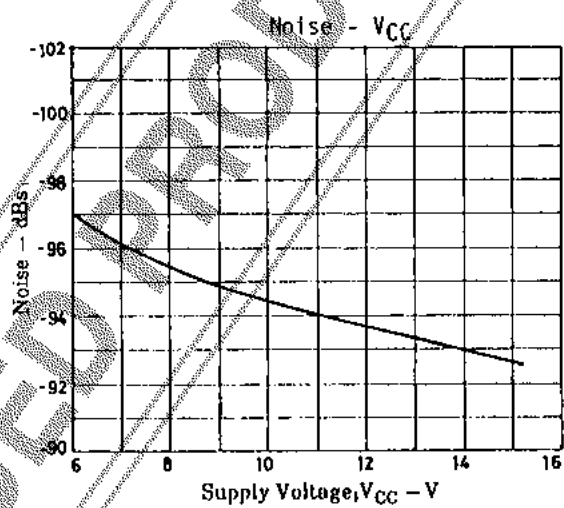
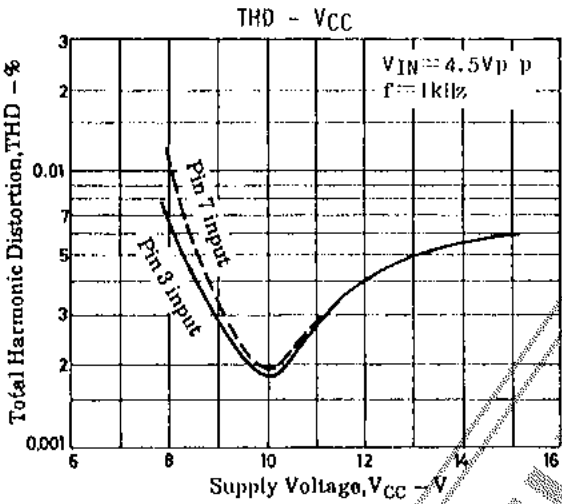
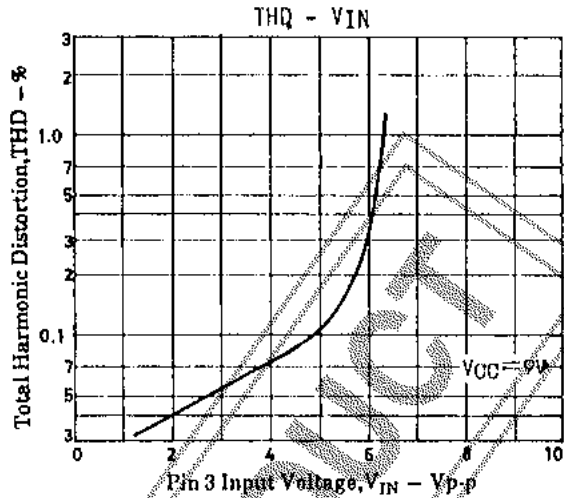
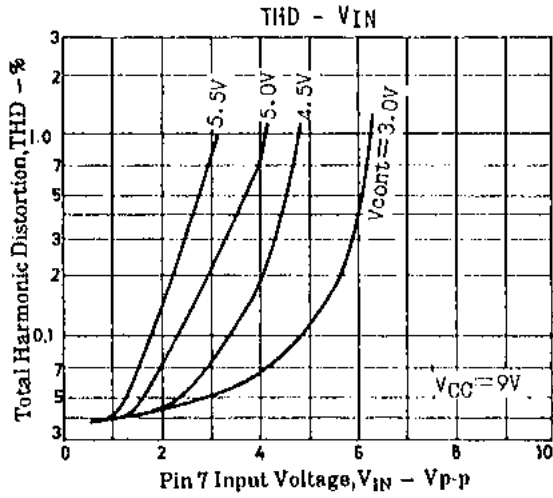


Test Conditions

Item	Symbol	SW mode			Test Point
		SW1	SW2	SW3	
Circuit Current	I_D	c	c	c	A_1
Distortion (1)	THD	b	b	c	V_4
Distortion (2)	THD	a	c	b	V_4
Noise (1)	e_n	b	c	c	V_4
Noise (2)	e_n	a	c	c	V_4
Crosstalk (1)	I_{s1}	b	c	a	V_4
Crosstalk (2)	I_{s2}	a	a	c	V_4
Pedestal	ΔV_{PED}	a-b	c	c	V_1
Pin voltage (pin 1)		b	c	c	V_1
Pin voltage (pin 3)		b	c	c	V_2
Pin voltage (pin 3)		a	c	c	V_2
Pin voltage (pin 7)		a	c	c	V_3
Pin voltage (pin 7)		b	c	c	V_3



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