

**SANYO**

No.1054B

**LA7019**

Monolithic Linear IC

Electronic Switch  
for Use in VTR Applications**Features**

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

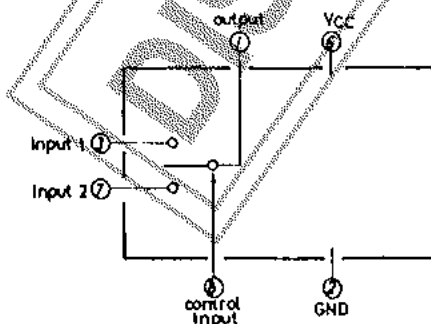
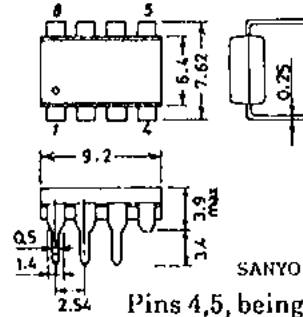
**Maximum Ratings at Ta = 25°C**

				unit
Maximum Supply Voltage	V <sub>CC</sub> max		15	V
Allowable Power Dissipation	P <sub>d</sub> 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<sub>CC</sub> = 12V**

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

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

For input 1 test, V<sub>cont</sub> (pin 8 voltage) is 2.0V.For input 2 test, V<sub>cont</sub> is 3.0V.**Equivalent Circuit Block Diagram****Case Outline 3030A-D8C21C**  
(unit : mm)

SANYO :

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

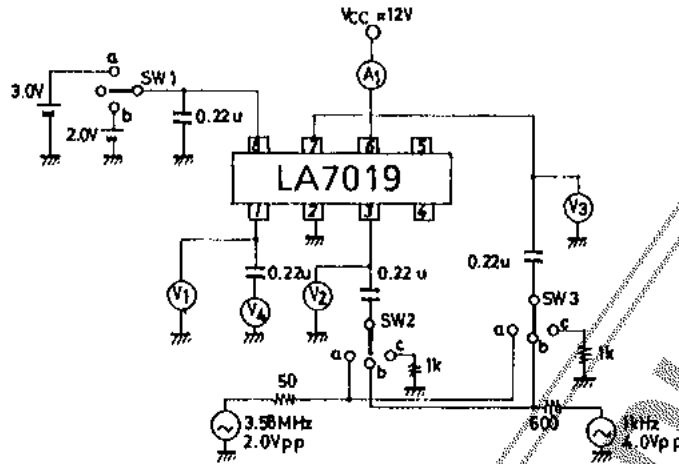
Specifications and information herein are subject to change without notice.

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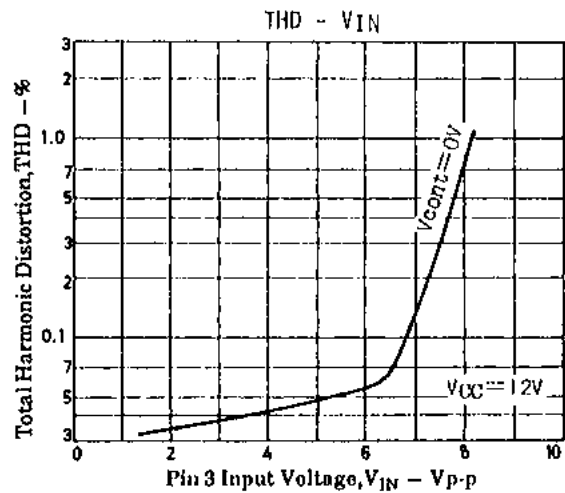
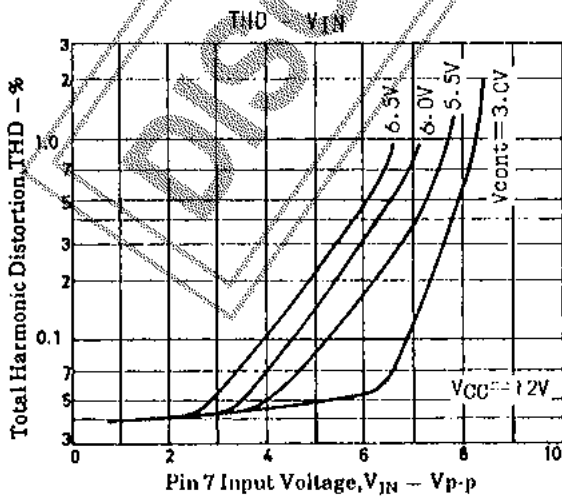
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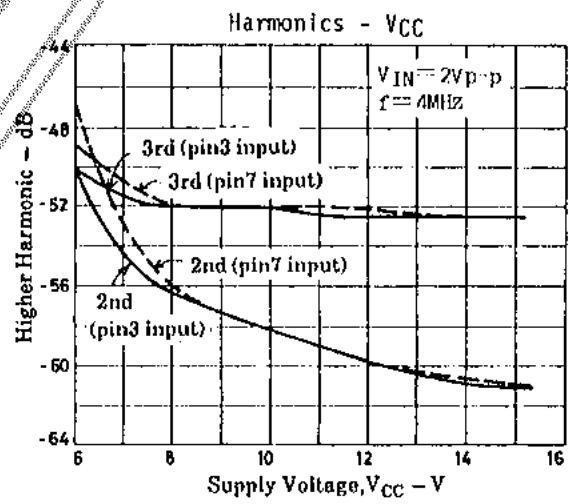
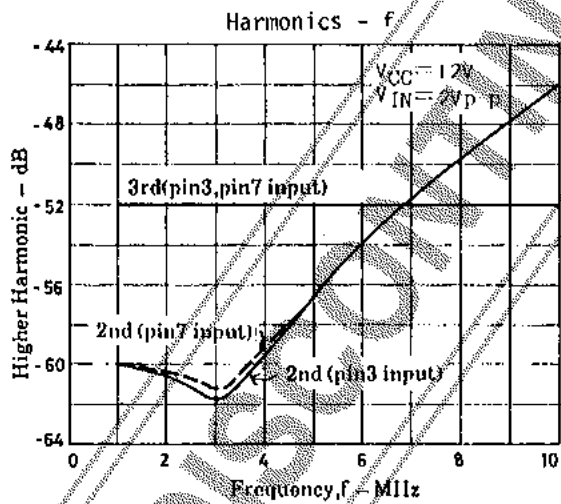
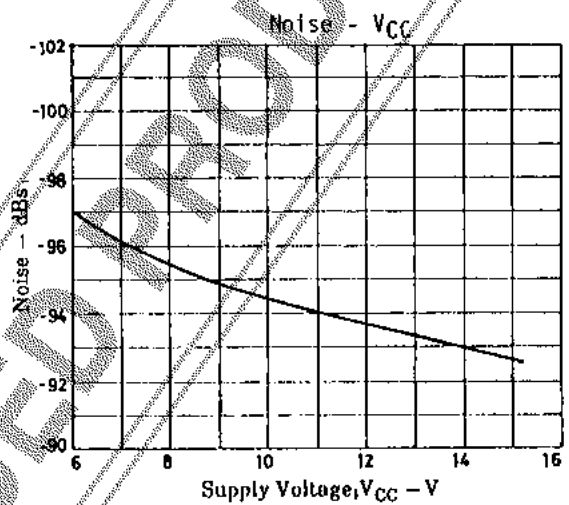
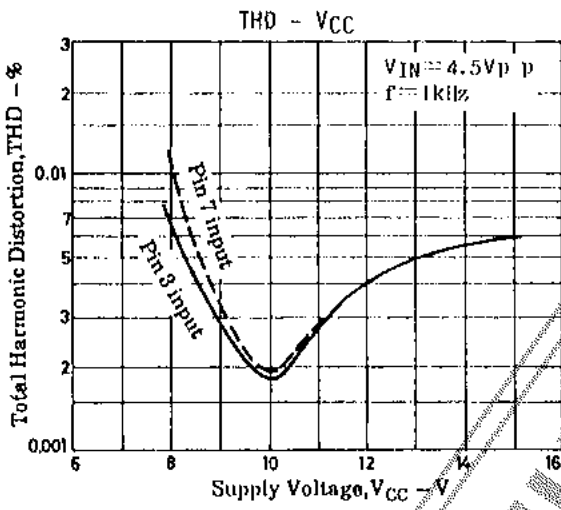
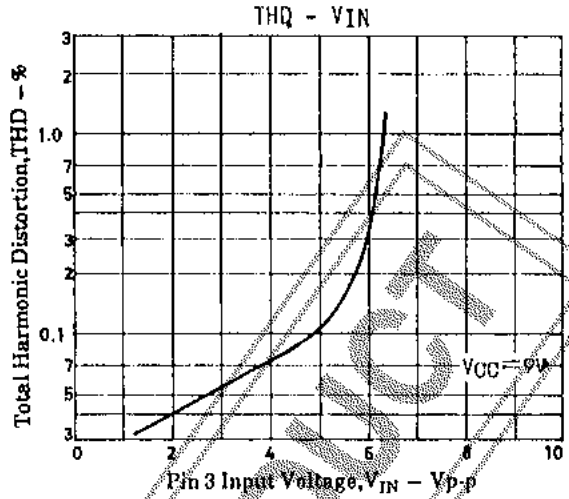
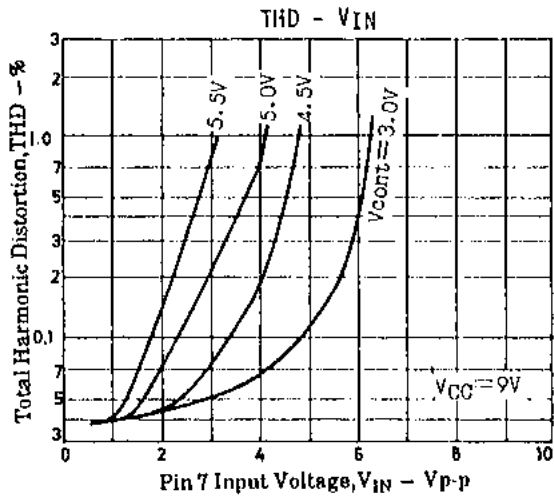
## Test Circuit



## 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	$\Delta V_{PED}$	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	$V_3$





The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass-produced.  
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