

SANYO

No.1054B

LA7019

Monolithic Linear IC

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

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

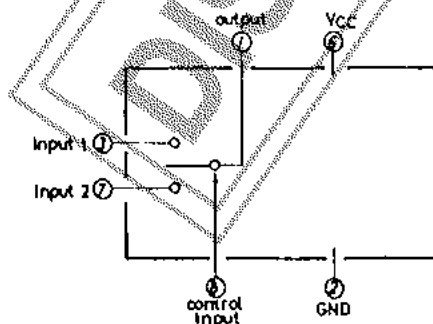
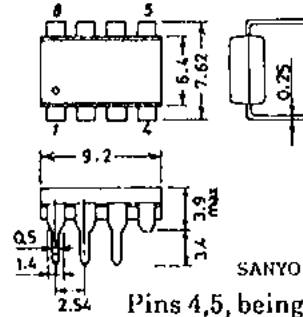
Maximum Ratings at Ta = 25°C

| | | | unit |
|-----------------------------|---------------------|-----------|----------------|
| Maximum Supply Voltage | V _{CC} max | | 15 V |
| Allowable Power Dissipation | P _d 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, 4.5V _{p-p} , f = 1kHz, R _L = ∞ | 0.007 | 0.1 | | % |
| Noise | e _n | *R _g = 600Ω, f = 20Hz to 20kHz, R _i = ∞ | -93 | -80 | | dBs |
| Crosstalk | I _{sl} | *Input A : R _g = 50Ω, f = 3.58MHz 2V _{p-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, 4.0V _{p-p} , R _L = ∞ | 46 | 55 | | dB |
| Third Harmonic | | R _g = 50Ω, f = 1MHz, 4.0V _{p-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-D8C21C**
(unit : mm)

SANYO :

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

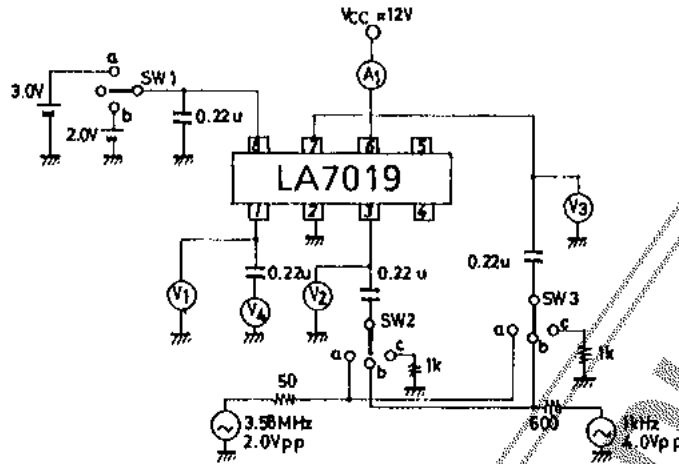
Specifications and information herein are subject to change without notice.

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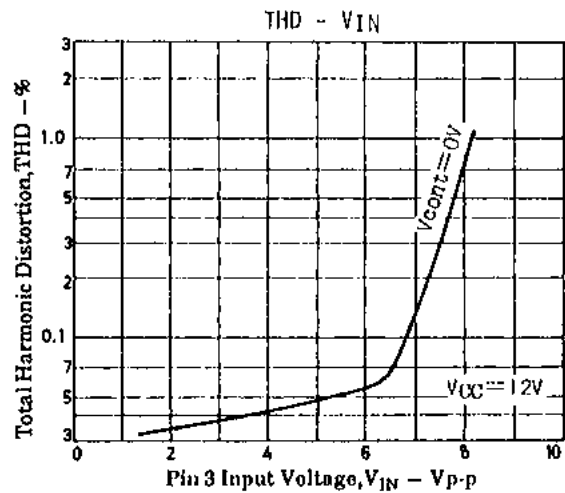
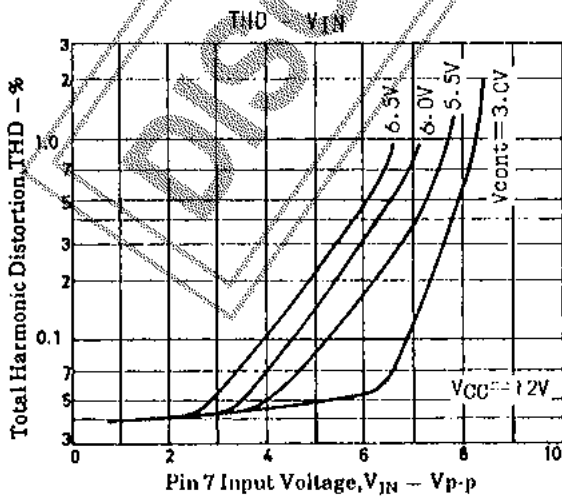
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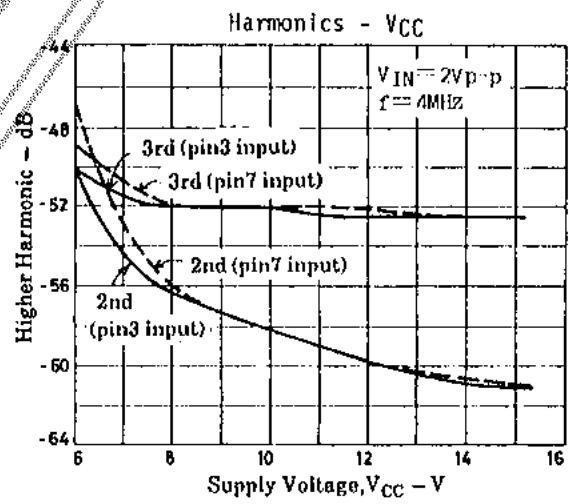
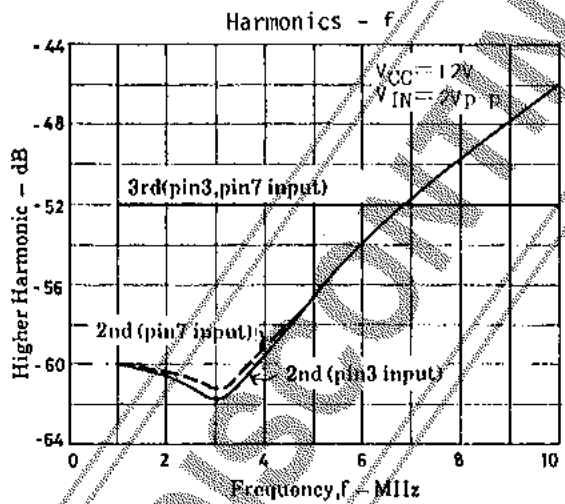
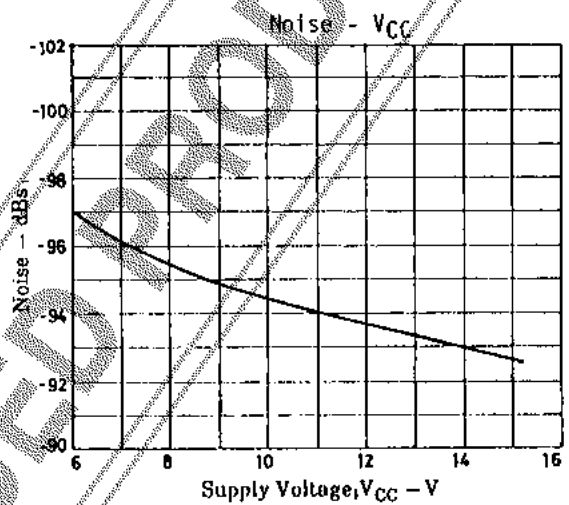
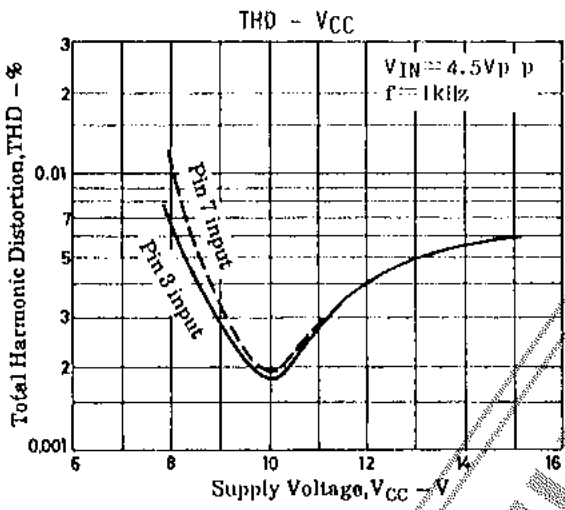
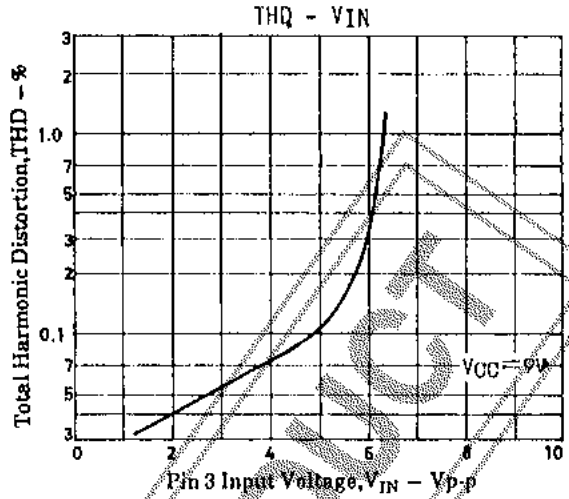
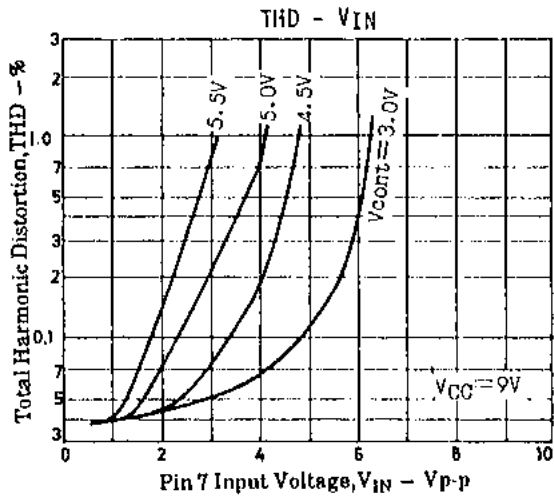
Test Circuit



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 | 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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