

SANYO

No.1053B

LA7018

Monolithic Linear IC

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

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

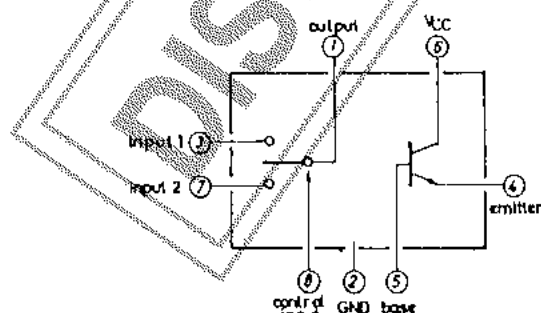
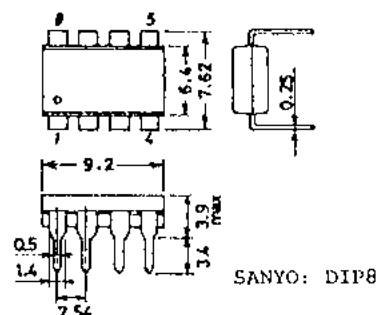
Maximum Ratings/ $T_a=25^\circ\text{C}$

Maximum supply voltage	V_{CC} max	15	V
Allowable power dissipation	P_d max	300	mW
Operating Temperature	T_{opg}	-20 to +65	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

Operation Characteristics/ $T_a=25^\circ\text{C}$, $V_{CC}=12\text{V}$

Circuit current	I_D		9.3	12.5		mA
Total harmonic distortion	THD	* $R_g=600\Omega$, $4.5V_{p-p}$, $f=1kHz$, $R_L=\infty$	0.007	0.1		%
Noise	e_n	* $R_g=600\Omega$, $f=20Hz$ to $20kHz$, $R_L=\infty$	-93	-80		dBs
Crosstalk	I_{s1}	*Input A: $R_g=50\Omega$, $f=3.58MHz$, $2V_{p-p}$, Input B: $R_g=1k\Omega$, $V_g=2.2V$ to $3.0V$	46	60		dB
Pedestal	ΔV_{ped}	$V_g=2.2V$ to $3.0V$	-100	0	+100	mV
Second harmonic		$R_g=50\Omega$, $f=1MHz$, $4.0V_{p-p}$, $R_L=\infty$	46	55		dB
Third harmonic		$R_g=50\Omega$, $f=1MHz$, $4.0V_{p-p}$, $R_L=\infty$	46	52		dB
Control, threshold voltage	V_{8s}		2.2	2.6	3.0	V
Pin voltage (pin 4)	V_1			6.9		V
Pin voltage (pin 7)	V_3	$V_3=2.2V$		7.6		V
Pin voltage (pin 7)	V_3	$V_3=3.0V$		7.6		V
Pin voltage (pin 2)	V_7	$V_3=3.0V$		7.6		V
Pin voltage (pin 2)	V_7	$V_3=2.2V$		7.6		V
Pin current	I_5		60	130		μA

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

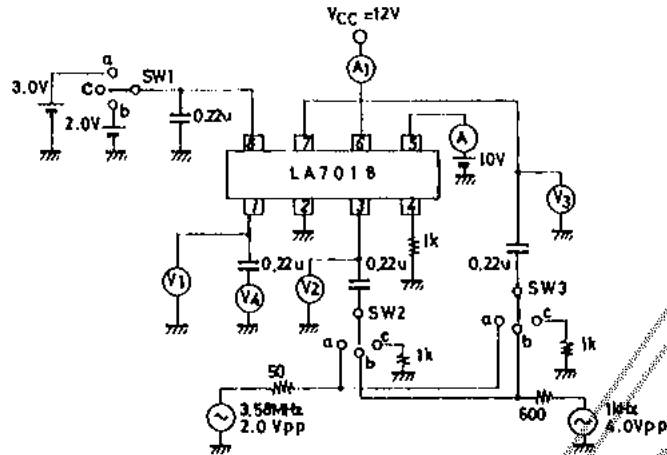
For input 1 test, V_{cont} (pin 8 voltage) is 2.0V.For input 2 test, V_{cont} is 3.0V.**Equivalent Circuit Block Diagram****Case Outline 3001A-D8IC**
(unit:mm)

Specifications and information herein are subject to change without notice.

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O148YT/8182 No.1053-1/3

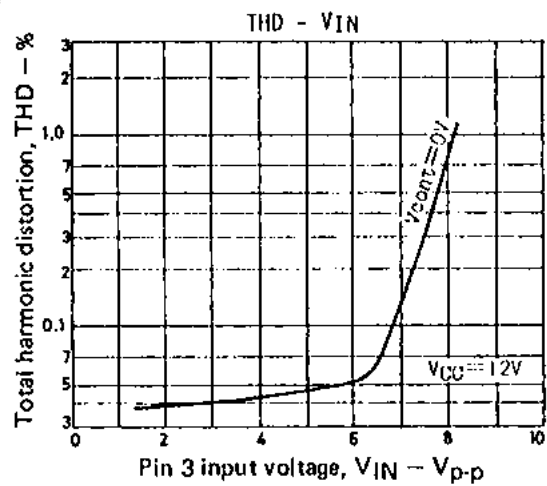
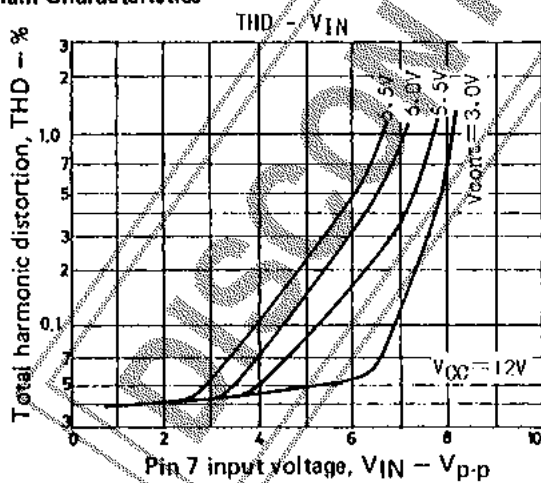
Test Circuit

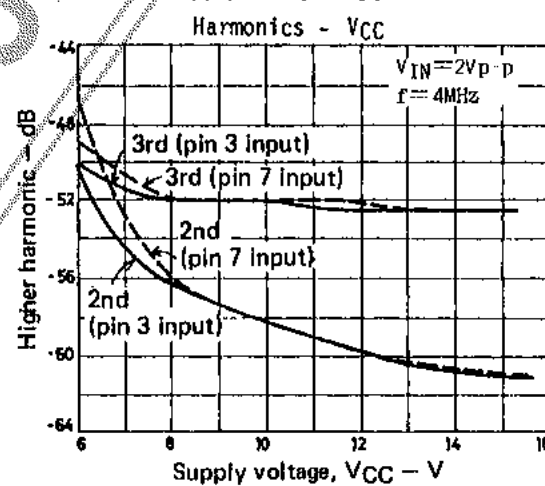
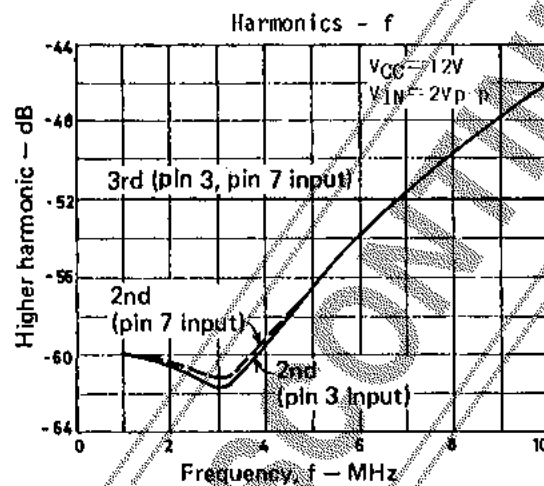
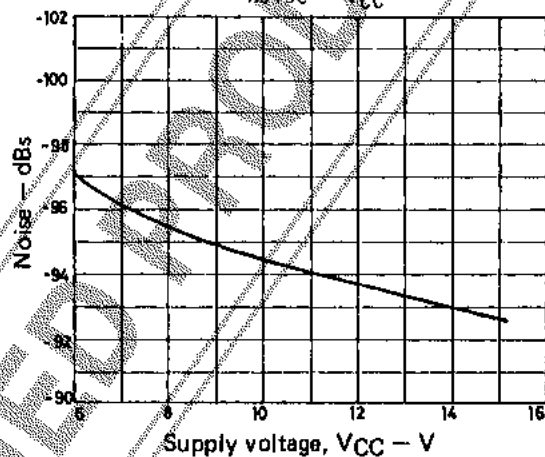
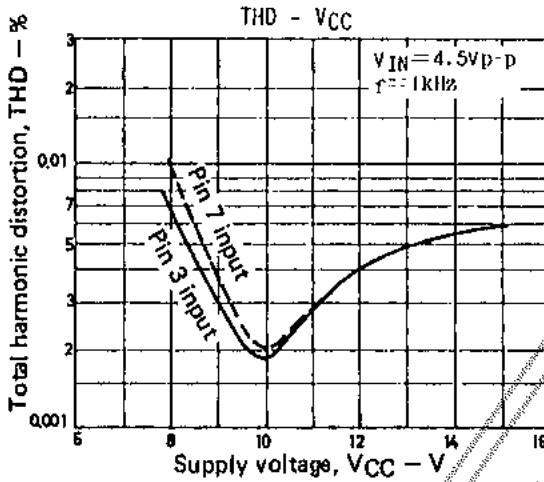
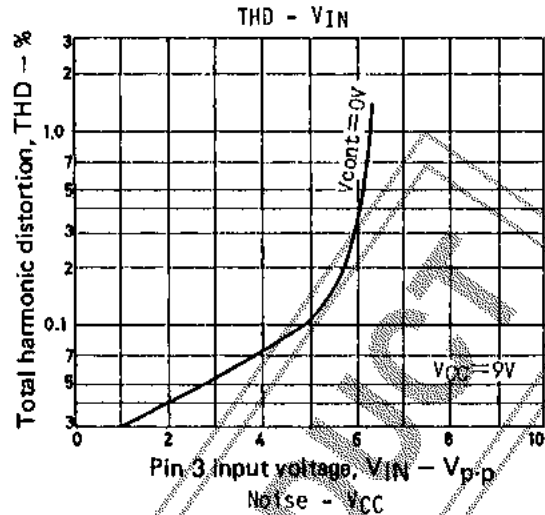
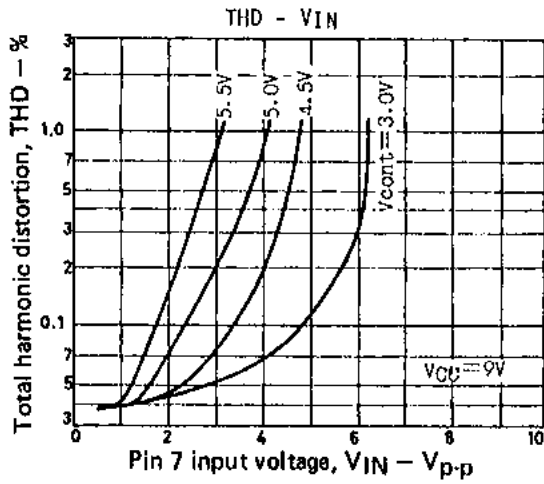


Test Conditions

Item	Symbol	SW mode			Test point
		SW1	SW2	SW3	
Circuit current	I_{ij}	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_{B1}	b	c	a	V ₄
Crosstalk (2)	I_{B2}	a	c	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

Main Characteristics





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