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NTE7066
Integrated Circuit
2 Channel, 2 Position Audio/Video Switch for VCR

Description:

The NTER7066 is a 2–Channel, 2–Position high–performance analog switch having wide application usage from audio band to video band.

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Maximum Supply Voltage, V_{CC}max 15V
Allowable Power Dissipation (T_A = +65°C), $P_d$max 350mW
Operating Temperature Range, T_{opr} . . . . . –20° to +65°C
Storage Temperature Range, T_{stg} . . . . . –55° to +125°C

Recommended Operating Characteristics: (T_A = +25°C)

Recommended Supply Voltage, V_{CC} 12V
Operating Voltage Range, V_{CC}op . . . . . 8 to 13V

Electrical Characteristics: (T_A = +25°C, V_{CC} = 12V unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Current Dissipation	I_{CC}	No Input	12	17	22	mA
Total Harmonic Distortion	THD	R_g = 600Ω, V_{IN} = 4.5V_{P-P}, f = 1kHz	–	0.007	0.1	%
Output Noise Voltage	V_{ON}	R_g = 600Ω, DIN AUDIO FILTER (20Hz to 20kHz)	–	–110	–100	dBs
Crosstalk (CH1)	CR1	R_g = 50Ω (No input side R_g = 600Ω), V_{IN} = 2V_{P-P}, f = 3.58MHz	–57	–62	–	dB
(CH2)	CR2		–52	–57	–	dB
Maximum Input Voltage	V_{IN}	R_g = 600Ω, f = 1kHz, THD = 1%	5.0	–	–	V_{P-P}
2nd Harmonic	H_2	R_g = 50Ω, V_{IN} = 4V_{P-P}, f = 1MHz	–46	–55	–	dB
3rd Harmonic	H_3	R_g = 50Ω, V_{IN} = 4V_{P-P}, f = 1MHz	–46	–55	–	dB
Input Impedance	z_{in}		–	10	–	kΩ

Electrical Characteristics (Cont'd): (T_A = +25°C, V_{CC} = 12V unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Impedance	z_o		–	30	60	Ω
Input Hold Voltage Switch A	V_{CA}	Pin2, Pin4 DC	3.8	–	V_{CC}	V
Switch B	V_{CB}		0	–	2.0	V
Output DC Offset Voltage	ΔV_{ODC}	Output voltage difference at the time of changeover from Switch A to Switch B, and vice versa	–50	0	+50	mV
Crosstalk Between Channels	CR_{ch}	Rg = 500Ω, R_L = ∞, Other channel input Rg = 500Ω, V_{IN} = $2V_{P-P}$, f = 3.58MHz	–58	–63	–	dB

Pin Connection Diagram