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NTE1268 Integrated Circuit DC Servo Circuit for VCR

Description:

The NTE1268 is an integrated circuit in a 28-Lead DIP type package designed for DC Servo Control Circuits in VCR's.

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Supply Voltage (V_{5-24}), V_{CC} 14.4V
Power Dissipation, P_D 640mW
Operating Temperature Range, T_{opr} -20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg} -40° to $+150^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 12\text{V}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	I_{5-2}		23	31	41	mA
Trapezoidal Reference Voltage	V_{16-24}		0.77	1.0	1.2	V
Output Voltage FF-II	V_{23-24}		10.0	10.9	—	V
Trapezoidal I	V_{17-24}		2.4	3.0	3.6	V
Trapezoidal II	V_{17-24}		11.0	11.9	—	V
S & H-I	V_{12-24}		—	240	500	mV
S & H-II	V_{12-24}		8.0	8.8	—	V
Gate-II	V_{10-24}		9.0	10.0	—	V
Input Sensitivity MM	V_{22-24}		3.5	—	—	V_{O-P}
Trapezoidal	V_{15-24}		4	—	—	V_{O-P}
Gate	V_{7-24}		3.5	—	—	V_{O-P}
S & H	$V_{is(14)}$	$f = 30\text{Hz}$, $PW = 100\mu\text{s}$	1.5	—	—	V_{O-P}
DET-I	$V_{is(28)}$	400Hz, 1/2 Sampling Sine Wave, $t_d = 1\text{ms}$	50	—	—	mV_{O-P}
DET-II	$V_{is(2)}$		50	—	—	mV_{O-P}
FF	$V_{is(4)}$	$f = 400\text{Hz}$	100	—	—	mV_{P-P}
FF	$V_{is(25)}$	$f = 30\text{Hz}$, Rectangular Wave	3	—	—	V_{O-P}



Pin Connection Diagram

Ripple Filter	1	28	Detector 1 Input
Detector 2 Input	2	27	Detector Time Constant
Detector Time Constant	3	26	Jumper to Pin22 & Pin25
FG Amp Input	4	25	Jumper to Pin22 & Pin26
V _{CC}	5	24	GND Return
Flip-Flop Output	6	23	To Head Switch
Gate Input	7	22	Jumper to Pin25 & Pin26
Gate Time Constant	8	21	Multi Time Constant
Gate Time Constant	9	20	Multi Time Constant
Motor Speed Signal Output	10	19	GND
Ripple Filter	11	18	S & H Signal Source
Motor Phase Signal Output	12	17	Bypass
Bypass	13	16	Resistive Constant
Timing Signal Input	14	15	Timing Reference Signal

