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NTE1806 Integrated Circuit Head Amplifier Circuit for 4 Head VCR

Features:

- Built-in Enveloped Comparing Circuit
- Built-in Peaking Amplifier Circuit
- Less Noise Voltage Referred to Input: $1\mu V_{rms}$

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

Supply Voltage, V_C 6V
 Power Dissipation ($T_A = +70^\circ C$), P_D 250mW
 Operating Ambient Temperature, T_{opr} -20° to $+70^\circ C$
 Storage Temperature Range, T_{stg} -55° to $+150^\circ C$

Electrical Characteristics: ($T_A = +25^\circ C$, $V_{CC} = 5V$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Circuit Current	I_{16}		16	–	40	mA
Channel I Gain	G_{3-15}	$f = 1MHz$	50.5	–	60.5	dB
Channel II Gain	G_{4-15}	$f = 1MHz$	50.5	–	60.5	dB
Channel III Gain	G_{8-15}	$f = 1MHz$	50.5	–	60.5	dB
Channel IV Gain	G_{9-15}	$f = 1MHz$	50.5	–	60.5	dB
AGC Output Amplitude	v_{20}	$f = 4MHz$	100	–	190	mV_{P-P}
AGC Control Sensitivity	v_{20}	$f = 4MHz$	–	–	3	dB
Head Switch Changeover Sensitivity	S_1		–	–	1	V
Head Amp Switch Changeover Sensitivity	S_{11}		–	–	1	V
Noise Voltage Referred to Input (I)	V_{ni3-15}	1MHz BFP	–	–	1	μV_{rms}
Noise Voltage Referred to Input (II)	V_{ni4-15}	1MHz BFP	–	–	1	μV_{rms}
Noise Voltage Referred to Input (III)	V_{ni8-15}	1MHz BFP	–	–	1	μV_{rms}
Noise Voltage Referred to Input (IV)	V_{ni9-15}	1MHz BFP	–	–	1	μV_{rms}
Envelope Comparative Output Amplitude	v_{14}		4.3	–	–	V_{P-P}
Envelope Comparative Output Stop Sensitivity	S_{17}		–	–	1.2	V

Note 1. Operating Supply Voltage Range: $V_{CC(opr)} = 4.5$ to $5.5V$

Pin Connection Diagram

