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## NTE1807 Integrated Circuit Head Amplifier Circuit for 2 Head VCR

**Features:**

- 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 ( $T_A = +70^\circ C$ ), $P_D$ .....	130mW
Operating Ambient Temperature, $T_{opr}$ .....	$-20^\circ$ to $+70^\circ C$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ 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	$I_1$		10	–	24	mA
Channel I Gain	$G_{3-9}$	$f = 1MHz, 0.5mV_{P-P}$	52.5	–	62.5	dB
Channel II Gain	$G_{5-9}$	$f = 1MHz, 0.5mV_{P-P}$	52.5	–	62.5	dB
AGC Output Amplitude	$v_{12}$	$f = 4MHz, 0.3mV_{P-P}$	154	–	286	$mV_{P-P}$
AGC Control Sensitivity	$\Delta v_{20}$	$f = 4MHz, 0.3mV_{P-P}$	–	–	3	dB
PG Switch Changeover Sensitivity	$S_8$	$f = 1MHz, 0.5mV_{P-P}$	–	–	3.5	V
Noise Voltage Referred to Input (I)	$V_{ni1}$	1MHz BFP	–	–	1	$\mu V_{rms}$
Noise Voltage Referred to Input (II)	$V_{ni2}$	1MHz BFP	–	–	1	$\mu V_{rms}$

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

### Pin Connection Diagram

