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## NTE1571 Integrated Circuit Dual Preamp for Tape Recorder

**Features:**

- Built-in Buffer Amplifier
- No Input Coupling Capacitor
- Quick Stabilization at Power ON
- Wide Supply Voltage Range:  $V_{CC} = 3V$  to  $16V$
- Automatic Level Control

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

Supply Voltage, $V_{CC}$ .....	16V
Output Current (Buffer Amp Pin 2 & 13), $I_2, I_{13}$ .....	3mA
Output Current (Preamp Pin 6 & 9), $I_6, I_9$ .....	2mA
Power Dissipation, $P_D$ .....	625mW
Operating Temperature Range, $T_{opr}$ .....	$-25^\circ$ to $+75^\circ C$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+150^\circ C$

**Electrical Characteristics:** ( $T_A = +25^\circ C, V_{CC} = 5V, f = 1kHz$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	$I_{CCQ}$		6	10	15	mA
Input Terminal DC Voltage	$V_6, V_9$		-	15	50	mV
Output Terminal DC Voltage	$V_3, V_{12}$		2.2	2.5	2.8	V
Buffer Output DC Voltage	$V_2, V_{13}$		1.4	1.6	2	V
ALC Bias Voltage	$V_7$		0.4	0.55	0.7	V
ALC ON Voltage	$V_{IN(ALC)}$	$V_6 = 1.4V$	-	5	30	mV
ALC Range	$R_{ALC}$	$V_{IN} = -60dBm$	35	40	-	dB
ALC Level	$V_{OUT(ALC)}$	$V_{IN} = -20dBm$	-3	-1	1	dBm
Total Harmonic Distortion	$THD_{(ALC)}$		-	0.6	2	%
ALC Balance	$B_{ALC}$		-	0	2	dB
Max. Output Voltage	$V_{OM}$	$THD = 1\%$	1.3	1.7	-	$V_{rms}$
Channel Crosstalk	CT	$R_g = 2.2k\Omega, V_{OUT} = 0dBm$	40	50	-	dB
Open Loop Voltage Gain	$G_{VO}$	$V_{IN} = -80dBm$	67	75	-	dB
Equivalent Input Noise	$V_{NI}$	$R_g = 2.2k\Omega$	-	1.3	2.7	$\mu V_{rms}$

### Pin Connection Diagram

