

NTE1466 Integrated Circuit Preamp ^w/ALC Transistors

Features:

- Pre-Amplifier (Recording or Playback) with ALC Transistors for Tape Recorder
- Low Noise: $V_{NI} = 1.3\mu V_{rms}$ (Typ)
- Wide ALC Range
- Operates from a Wide Range of Power Supplies: $V_{CCopr} = 3V$ to $15V$

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

Supply Voltage, V_{CC}	15V
Power Dissipation, P_D	200mW
Derate Above $25^\circ C$	2mW/ $^\circ C$
Operating Temperature Range, T_{opr}	-25° to $+75^\circ C$
Storage Temperature Range, T_{stg}	-55° to $+125^\circ C$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC}	$V_{IN} = 0$, ALC off	–	1.3	1.75	mA
Voltage Gain (Open Loop)	G_{VO}	$V_{IN} = -80dBm$ $f = 1kHz$	67	69	–	dB
Voltage Gain (Closed Loop)	G_V	$V_{OUT} = 0.7V_{rms}$ $f = 1kHz$, Note 1	33	35	37	dB
Maximum Output Voltage	V_{OM}	$f = 1kHz$ (below), THD = 1% Max	0.7	0.9	–	V_{rms}
Equivalent Input Noise Voltage	V_{NI}	$R_g = 2.2k\Omega$, NAB (Compensated), 1kHz Gain Converted with G_V (1kHz)	–	1.3	2.5	μV_{rms}
Input Resistance	R_{IN}	$f = 1kHz$	–	150	–	$k\Omega$
Saturation Voltage, Q_5	$V_{6(ON)}$		–	60	100	mV

Note 1. In regard to the voltage gain (closed loop voltage) value, it is possible to be classified.

Pin Connection Diagram
(Front View)

