

NTE1612 Integrated Circuit AF PO, 0.7W for Battery Use

Features:

- Wide Operating Voltage (2V to 6V)
- Power Amplifier has High Output (430mW), Low Noise (0.25mV_{RMS}) and Low Distortion (0.4%)
- Maximum Output can be 700mW
- High Ripple Rejection Ratio (typically 46dB)
- Very Low High-Frequency Distortion and a Sort Cuppea Wave Form make this a Superior Audio Amplifier
- Built-In Power Switching Circuit

Applications:

- Portable Radio
- Television
- Cassette Tape Recorder
- Intercoms

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

Power Supply Voltage, V_{CC}	9V
Power Dissipation, P_D	950mW
Derate Above 25°C	9.5mW
Operating Temperature Range, T_{opr}	-10° to $+65^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+125^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 6\text{V}$, $R_L = 8\Omega$, $f = 1\text{kHz}$ unless otherwise specified)

Parameter	Sym- bol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_O	$V_{IN} = 0V_{rms}$	—	12	24	mA
Voltage Gain (Close Circuit)	G_{VC}	$R_{NFC} = 47\Omega$, $V_{IN} = 2.5mV_{rms}$	48	52	54	dB
Maximum Output	P_{OM}	$V_{IN} = 25mV_{rms}$	600	700	—	mW
Rated Output	P_{OUT}	THD = 10%	350	430	—	mW
Total Harmonic Distortion	THD	$P_O = 50mW$	—	0.4	2	%
Output Noise Voltage	V_{NO}	$R_g = 0\Omega$	—	0.25	0.7	mV _{rms}
Input Resistance	R_{IN}	$P_O = 50mW$	—	22	—	k Ω

Pin Connection Diagram
(Front View)

