ELECTRONICS, INC.
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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°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°C
Storage Temperature Range, T_{stg} . . . . . –30° to +125°C

Electrical Characteristics: (T_A = +25°C, V_{CC} = 6V, R_L = 8Ω, f = 1kHz 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} = 47Ω, 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 = 0Ω	–	0.25	0.7	mV$_{rms}$
Input Resistance	R_{IN}	P_O = 50mW	–	22	–	kΩ

Pin Connection Diagram
(Front View)