



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089

NTE1682 Integrated Circuit Pre-Amplifier Circuit for Remote Control Signal Receivers

Description:

The NTE1682 is an integrated circuit in a 9-Lead SIP type package designed for use in infrared and various types of remote control signal receivers.

Features:

- High Sensitivity, High Gain, Low Noise
- Waveform Shaping Circuit
- Voltage Regulator Circuit

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

Supply Voltage, V_{CC} 15.6V
 Supply Current, I_{CC} 25mA
 Power Dissipation, P_D 400mW
 Operating Ambient Temperature Range, T_{opr} -20° to $+75^{\circ}\text{C}$
 Storage Temperature Range, T_{stg} -55° to $+150^{\circ}\text{C}$

Electrical Characteristics: ($T_A = +25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Supply Voltage Range	V_{CC}		9.6	12.0	14.4	V
Supply Current	I_{CC}	$V_{CC} = 12\text{V}$, Input Open	5	8	10	mA
Bias Voltage	V_{3-5}	$V_{CC} = 12\text{V}$, Input Open	1.65	2.4	3.3	V
Amplifier Output Voltage	V_7	$V_{il} = 5V_{P-P}$ Sine Wave, $f_{il} = 42\text{kHz}$, Att: 0db	2.5	3.2	–	V_{P-P}
		$V_{il} = 5V_{P-P}$ Sine Wave, $f_{il} = 42\text{kHz}$, Att: 80db	0.8	2.3	–	V_{P-P}
Pulse Output, High Level	$V_{4-5(H)}$	$V_{CC} = 12\text{V}$, $V_D = 1.3\text{V}$ to 4.0V	3.5	4.4	5.0	V
Pulse Output, Low Level	$V_{4-5(L)}$	$V_{CC} = 12\text{V}$, $V_D = 0\text{V}$ to 0.5V	–	0.55	0.8	V

Pin Connection Diagram
(Front View)

