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## NTE1435 Integrated Circuit Dual Audio Preamp

**Description:**

The NTE1435 is an integrated circuit in a 9-Lead SIP type package designed for preamp applications incorporating two channels such as car stereo applications. With stabilized power source built-in, this device offers high gain, low distortion, low noise, and high output voltage.

**Features:**

- High Gain and Low Noise
- High Gain Over a Wide Range of Supply Voltage
- Good Channel Separation

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

Supply Voltage,  $V_{CC}$  ..... 18V  
 Supply Current,  $I_{CC}$  ..... 17mA  
 Power Dissipation,  $P_D$  ..... 310mW  
 Operating Ambient Temperature Range,  $T_{opr}$  .....  $-30^{\circ}$  to  $+75^{\circ}\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-55^{\circ}$  to  $+125^{\circ}\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	$I_{tot}$	$V_i = 0$	–	9	13	mA
Open Circuit Voltage Gain	$G_{VO}$		85	90	–	dB
Output Voltage	$V_O$	THD = 1%	1.0	1.8	–	v
Total Harmonic Distortion	THD	$V_O = 300\text{mV}$ , $G_{VC} = 35\text{dB}$	–	–	0.1	%
Noise Voltage Referred to Input	$V_{ni}$	$R_g = 2.2\text{k}\Omega$ , Note 1	–	1.2	2.0	$\mu\text{V}$
Input Impedance	$Z_i$		50	100	–	$\text{k}\Omega$
Crosstalk	CT	$f = 10\text{kHz}$	–	–65	–	dB

Note 1. Measured with 15Hz to 30Hz ( $-3\text{dB}$ ) band pass filter.

**Pin Connection Diagram**  
(Front View)

