

NTE829 Integrated Circuit Electronics Attenuator, 90dB @ 1kHz

Features:

- Designed for use in:
 DC Operated Volume Control
 Compression & Expansion Amplifier Applications.
- Controlled by DC Voltage or External Variable Resistor
- Economical 8-Lead DIP Package
- Temperature Range: 0° to +75°C

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

Power Supply Voltage, V_{CC} 20V
 Power Dissipation ($T_A = +25^\circ\text{C}$), P_D 1.2W
 Derate above 25°C 10mW/ $^\circ\text{C}$
 Operating Ambient Temperature Range, T_{opr} 0° to +75°C

Electrical Characteristics: ($e_{in} = 100\text{mV}_{(RMS)}$, $f = 1.0\text{kHz}$, $V_{CC} = 16\text{V}$, $T_A = +25^\circ\text{C}$, unless otherwise indicated)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Power Supply Voltage	V_{SS}		9	–	18	V
Control Pin Sink Current	I_C	$e_{in} = 0$	–	–	2	mA
Maximum Input Voltage	V_i		–	–	0.5	$V_{(RMS)}$
Voltage Gain	A_V		11	13	–	dB
Attenuation Range	K	$R_C = 33\text{k}\Omega$	70	90	–	dB
Total Harmonic Distortion	THD	Pin2 GND, $e_{in} = 100\text{mV}_{(RMS)}$, $e_o = A_V \times e_{in}$	–	0.6	1.0	%

Pin Connection Diagram

