

NTE1792 Integrated Circuit Dual Attenuator

Description:

The NTE1792 is a silicon monolithic integrated circuit in a 9-Lead SIP package designed for sound control applications.

Features:

- Two separate attenuators
- The characteristic control curve is linear against logarithmic output.
- Channel Separation: 64dB MIN
- Typical Application: Sound MPX attenuator for TV, Radio and mobile receiver.

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

Supply Voltage, V_{CC}		
Minimum	.....	0V
Maximum	.....	15V
Signal Input Voltage at Pin4 and Pin6, V_{in}$	.....	3V_{p-p}$
Control Input Voltage at Pin2 and Pin8, V_{cont}		
Minimum	.....	0V
Maximum	.....	15V
Power Dissipation ($T_S = +75^{\circ}\text{C}$), P_D	.....	350mW
Operating Temperature Range, T_{opr}	.....	-20° to $+75^{\circ}\text{C}$
Storage Temperature Range, T_{stg}	.....	-40° to $+125^{\circ}\text{C}$

Electrical Characteristics: ($V_{CC} = 12\text{V}$, $T_A = +25^{\circ}\text{C}$, $f = 1\text{kHz}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Voltage	V_{CC}		8.0	12.0	14.4	V
Supply Current	I_{CC}	No Signal	8.0	10.5	16.0	mA
Relative Output	A_V	$V_{cont} = 1\text{V}$, $V_{in} = 500\text{mV}_{rms}$	-2	0	+2	dB
Channel Separation	S_{ep}	$V_{cont} = 5\text{V}$, $V_{in} = 500\text{mV}_{rms}$	64	70	-	dB
Total Harmonic Distortion	T.H.D.	$V_{cont} = 5\text{V}$, $V_{in} = 500\text{mV}_{rms}$	-	0.5	1.0	%
Power Source Noise Rejection	R.R.	$H_{um} f = 60\text{Hz}$, $H_{um} \text{ Level} = 1V_{p-p}$	30	-	-	dB

Electrical Characteristics (Cont'd): ($V_{CC} = 12V$, $T_A = +25^\circ C$, $f = 1kHz$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage 1	ATT_1	$V_{cont} = 5V$, $V_{in} = 500mV_{rms}$	-1	0	+1	dB
Output Voltage 2	ATT_2	$V_{cont} = 5V$, $V_{in} = 500mV_{rms}$	-34	-30	-26	dB
Output Voltage 3	ATT_3	$V_{cont} = 5V$, $V_{in} = 500mV_{rms}$	-	-77	-71	dB
Input Resistance	R_i	$f = 1kHz$	12	-	24	$k\Omega$
Output Resistance	R_o	$f = 1kHz$	200	-	450	Ω

Pin Connection Diagram

