



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE1543 Integrated Circuit FM Noise Suppressor

**Features:**

- Less external components
- Low distortion and high signal to noise ratio
- Wide working supply voltage: 8V to 15V
- Wide working temperature range: -30° to 70°C

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

DC Supply Voltage,  $V_{CC}$  ..... 16V  
 Power Dissipation ( $T_A = +70^\circ\text{C}$ ),  $P_D$  ..... 420mW  
 Operating Temperature Range,  $T_{opr}$  ..... -30° to +70°C  
 Storage Temperature Range,  $T_{stg}$  ..... -55° to +125°C

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 12.4\text{V}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Voltage Gain	$G_V$	Pin 1 Input: $f = 1\text{kHz}$ , $V_{in} = 120\text{mV}$	-	0	-	dB
Total Harmonic Distortion	THD		-	0.035	-	%
Signal-to-Noise Ratio	S/N	Pin 1 Input: $f = 1\text{kHz}$ , $V_{in} = 120\text{mV}$ , 0dB $R_g = 4.7\text{k}\Omega$	-	80	-	dB
Output Voltage	$V_O$	Pin 1 Input: $f = 1\text{kHz}$ , Output THD = 2%	-	2.7	-	$V_{rms}$
Noise Supression Ratio	NSR	Pin 1 Input: $f = 1\text{kHz}$ , $V_{in} = 120\text{mV}$ , 0dB HPF Input: $f = 100\text{kHz}$ , $V_{in} = 80\text{mV}$	-	40	-	dB
Threshold Voltage	$V_{th}$	Pin 1 Input: $f = 1\text{kHz}$ , $V_{in} = 120\text{mV}$ , 0dB HPF Input: $f = 100\text{kHz}$ , $V_{in}$ : Variable	-	46	-	$mV_{rms}$
Pulse Duration of One Shot	T	HPF Input: Pin 10: Monitor	-	40	-	$\mu\text{s}$

Note \*. Cut-off Time Circuit is off condition (Pin 12 connected to Pin 9)

### Pin Connection Diagram

