



**ELECTRONICS, INC.**  
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## NTE1523 Integrated Circuit Dual, Low Noise Preamp

**Features:**

- General-Purpose Pre-Amplifier
- Low Noise Dual Pre-Amplifier
- Low Noise 1.2 $\mu$ V<sub>rms</sub> Equivalent Input Noise
- Channel Separation 55dB (Min)
- Operating Supply Voltage Range: V<sub>CC</sub> = 6V to 15V

**Absolute Maximum Ratings:** (T<sub>A</sub> = +25°C unless otherwise specified)

Supply Voltage, V<sub>CC</sub> ..... 15V  
 Power Dissipation, P<sub>D</sub> ..... 250mW  
 Operating Temperature Range, T<sub>opr</sub> ..... -30° to +75°C  
 Storage Temperature Range, T<sub>stg</sub> ..... -55° to +125°C

**Electrical Characteristics:** (V<sub>CC</sub> = 8V, R<sub>L</sub> = 10k $\Omega$ , R<sub>g</sub> = 600 $\Omega$ , f = 1kHz, T<sub>A</sub> = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I <sub>CC</sub>	V <sub>IN</sub> = 0	-	7.5	14	mA
Voltage Gain (Open Loop)	G <sub>VO</sub>	R <sub>f</sub> = 0/C <sub>f</sub> = 100 $\mu$ F	62	70	-	dB
Maximum Output Voltage	V <sub>OM</sub>	THD = 0.5%	1.2	1.95	-	V <sub>rms</sub>
Input Resistance	R <sub>IN</sub>		-	50	-	k $\Omega$
Equivalent Input Noise Voltage	V <sub>NI</sub>	R <sub>g</sub> = 2.2k $\Omega$	-	1.2	2.7	$\mu$ V <sub>rms</sub>
Cross Talk	CT	f = 10kHz, R <sub>g</sub> = 2.2k $\Omega$	-55	-65	-	dB



**Pin Connection Diagram**  
(Front View)

