

NTE1103 Integrated Circuit General Purpose, Low Noise Preamplifier

Features:

- Low Noise
- Wide Operating Supply Voltage Range: $V_{CC} = 3V$ to $12V$

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

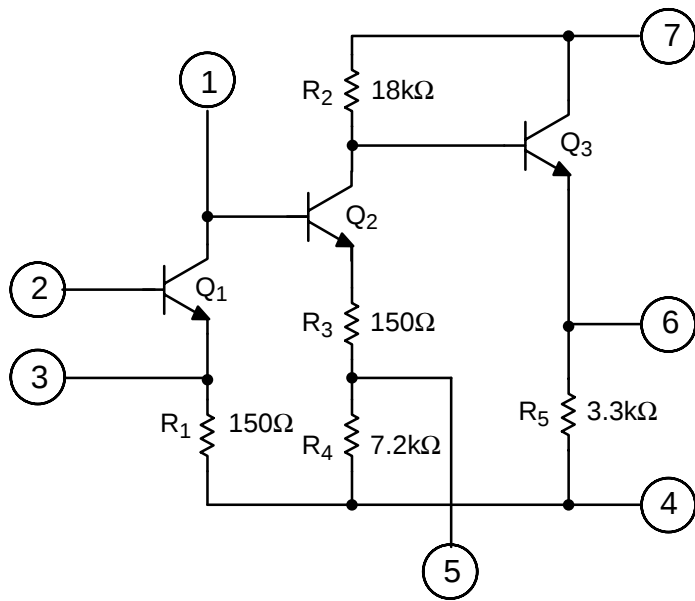
Supply Voltage, V_{CC}	15V
Power Dissipation, P_D	200mW
Derate Above $25^\circ C$	2mW/ $^\circ C$
Operating Temperature Range, T_{opr}	-30° to $+75^\circ C$
Storage Temperature Range, T_{stg}	-55° to $+125^\circ C$

Electrical Characteristics: ($T_A = +25^\circ C$, $V_{CC} = 8V$, $R_L = 22k\Omega$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC}	$V_{IN} = 0$	1.6	2.0	2.6	mA
Voltage Gain (Open Loop)	G_{VO}	$f = 1kHz$, $V_{IN} = -80dBm$	62	—	—	dB
Voltage Gain (Closed Loop)	G_V	$f = 1kHz$, $R_{NF} = 22k\Omega$, $V_{IN} = -45dBm$, Note 1	40.5	—	46.5	dB
Maximum Output Voltage	V_{OM}	$f = 1kHz$, $THD = 1\%$	1.0	—	—	V_{rms}
Equivalent Input Noise Voltage	V_{NI}	NAB equalizer, $R_g = 2.2k\Omega$, $f = 1kHz$	—	2.0	—	μV_{rms}

Note 1. In regard to the value of voltage gain (closed loop voltage), it is possible to be classified.

Equivalent Circuit



Pin Connection Diagram (Front View)

