

NTE1104 Integrated Circuit Wide and Narrow Band Amp, FM/IF Limiter

Applications:

- For FM IF Amplifier
- For TV SIF Amplifier

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

Supply Voltage, V_{CC}	15V
Output Voltage, V_{OUT}	24V
Input Voltage (Between Pin1 and Pin2), V_{IN}	$\pm 15V$
Power Dissipation, P_D	400mW
Derate Above 25°C	3mW/ $^\circ\text{C}$
Operating Temperature Range ($V_{CC} = 12V$), T_{opr}	-30 to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55 to $+125^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC}	$V_{CC} = 12V$	5.3	9.5	14.0	mA
		$V_{CC} = 9V$	—	6.5	—	mA
Power Dissipation	P_D	$V_{CC} = 12V$	—	114	—	mW
		$V_{CC} = 9V$	—	59	—	mW
Voltage Gain	G_V	$V_{CC} = 12V, R_g = 50\Omega, R_L = 1k\Omega$	—	26.5	—	dB
Input Impedance		$V_{CC} = 12V, f = 10.7\text{MHz}$				
Parallel Input Resistance	r_{ip}		—	35	—	k Ω
Parallel Input Capacitance	C_{ip}		—	8.0	—	pF
Output Impedance						
Parallel Input Resistance	r_{op}		—	80	—	k Ω
Parallel Input Capacitance	C_{op}		—	3.0	—	pF
Forward Transfer Admittance	y_f		—	30	—	mmhos
Reverse Transfer Admittance	y_r		—	2.0	—	μmhos

Pin Connection Diagram
(Front View)

