



ELECTRONICS, INC.

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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		$V_{CC} = 12V, f = 10.7\text{MHz}$		35	–	k Ω				
Parallel Input Resistance	r_{ip}									
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)

