



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

NTE1108 Integrated Circuit AM-FM IF Amplifier

Features:

- Small Power Consumption $I_{CC} = 6.5\text{mA}$ ($V_{CC} = 5\text{V}$)
- AM: Wide AGC Range (AGC = 65dB Typ.)
- FM: Excellent Limiter Characteristic
- High Integration and Many Functions

Absolute Maximum Ratings:

Supply Voltage, V_{4-9} 7.5V
 Operating Temperature Range, T_{opr} -15 to +70°C
 Storage Temperature Range, T_{stg} -40 to +125°C
 Minimum Operating Supply Voltage, V_{ccm} 3.0V

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 5\text{V}$, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Current Consumption	I_{CC}		-	6.5	8.8	mA
1st Block Voltage Gain	$VG_{1(AM)}$	$f = 455\text{kHz}$, $R_L = 1\text{k}\Omega$	41	46	-	dB
	$VG_{1(FM)}$	$f = 10.7$, $R_L = 1\text{k}\Omega$	28	33	-	dB
2nd Block Detection Gain	$VG_{2(DET)}$	$f = 455\text{kHz}$, ($f = 1\text{kHz}$ 30% mod $R_g = 470\Omega$) (Note 1)	4	9	-	dB
	$VG_{2(FM)}$	$f = 10.7\text{MHz}$, $R_L = 1\text{k}\Omega$, $R_g = 50\Omega$	38	44	-	dB
3rd Block Voltage Gain	VG_3	$f = 1\text{kHz}$	24	29	-	dB
AGC Range	AGC		55	65	-	dB

Note 1. $V_O(AF) = -20\text{dBS}$

Pin Connection Diagram
(Front View)

