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## NTE1072 Integrated Circuit FM-AM IF Amp & AF Amp

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

Supply Voltage ( $V_{CC}$ ), $V_{8-3}$ .....	7.5 V
Circuit Current, $I_7$ .....	20mA
Total Circuit Current, $I_{tot}$ .....	40mA
Total Power Dissipation, $P_T$ .....	300mW
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+75^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-65^\circ$ to $+150^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	$I_{tot}$		5.4	15	23.5	mA
Circuit Current	$I_7$	$V_7/100\Omega$	3.6	5.7	7.7	mA
	$I_9$		0.9	2.5	3.75	mA
Bias Reference Voltage	$V_{12-16}$		1.25	1.5	1.75	V
Detection Output Voltage	FM-IF $V_{O(FM)}$	$f = 10.7\text{MHz}$ , $V_{IN} = 10\mu\text{V}$	1.8	3	5	mV
	AM-IF $V_{O(AM)}$	$f = 455\text{kHz}$ , $V_{IN} = 32\mu\text{V}$	2.2	3.5	5.6	mV
Output Noise Voltage	$V_N$	$R_g = 5k\Omega$	-	-	1.2	mV
Output Voltage	$V_{7-3}$	$f = 1\text{kHz}$ , $V_{IN} = 1\text{mV}$	0.35	0.47	0.56	V

### Pin Connection Diagram

IF Input AM/FM	<b>1</b>	<b>16</b>	IF Amp Circuit
FM Detector Circuit	<b>2</b>	<b>15</b>	AM Detector Circuit
AF Circuit	<b>3</b>	<b>14</b>	AM Detector Circuit
AF Input	<b>4</b>	<b>13</b>	AM IF Amp Circuit
AF Circuit	<b>5</b>	<b>12</b>	Bypass
GND	<b>6</b>	<b>11</b>	Bypass
AF Output	<b>7</b>	<b>10</b>	Bypass
$V_{CC}$	<b>8</b>	<b>9</b>	FM Detector Circuit

