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## NTE1045 Integrated Circuit FM/TV Sound IF Amp, Detector

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

Supply Voltage, $V_{CC}$ .....	13V
Input Voltage, $V_{IN}$ .....	3V <sub>p-p</sub>
Supply Current, $I_{CC}$ .....	35mA
Power Dissipation, $P_d$ .....	350mW
Operating Temperature Range, $T_{opr}$ .....	-20° to +75°C
Storage Temperature Range, $T_{stg}$ .....	-40° to +125°C

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 10\text{V}$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	$I_{CC}$		-	18	25	mA
Voltage Gain	$A_{vIF1}$	$f = 4.5\text{MHz}$ , $50\Omega$ , $R_L = 1\text{k}\Omega$ , $V_i = 100\mu\text{V}_{rms}$	65	72	-	dB
	$A_{vIF2}$	$f = 10.7\text{MHz}$ , $50\Omega$ , $R_L = 1\text{k}\Omega$ , $V_i = 100\mu\text{V}_{rms}$	60	67	-	dB
Input Limit Voltage	$V_{i(lim)}$	$f = 4.5\text{MHz}$ , $50\Omega$	-	250	700	$\mu\text{V}_{rms}$
AM Rejection	AMR	$f = 4.5\text{MHz}$ , $\Delta f = 25\text{kHz}$ , FM100% $f_M = 400\text{Hz}$ , AM30%, $V_i = 1\text{mV}_{rms}$	40	50	-	dB
Output Voltage	$V_{OAF}$	$f = 4.5\text{MHz}$ , $\Delta f = 25\text{kHz}$ , $f_M = 400\text{Hz}$ , $V_i = 1\text{mV}_{rms}$	-	320	380	$\text{mV}_{rms}$
Total Harmonic Distortion	THD		-	0.8	1.5	%

**Pin Connection Diagram**  
(Front View)



