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NTE1040 Integrated Circuit FM IF Amp

Description:

The NTE1040 is a silicon monolithic integrated circuit designed for FM-IF Amplifiers. This device features the capability of nonsaturating limiter operation with a suitable output load, rendering it ideally adaptable to FM-IF limiter application.

Applications include FM-IF limiter amplifiers, TV sound IF amplifiers, and chroma reference oscillators for color TV.

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

Supply Voltage, V_{CC} 20V
 Input Voltage, V_{in} $\pm 5V$
 Power Dissipation, P_T 200mW
 Operating Temperature Range, T_{opr} -20° to $+70^\circ\text{C}$
 Storage Temperature Range, T_{stg} -55° to $+125^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = 12V$, $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Power Dissipation	P_T		-	110	170	mW
DC Total Current	I_T		5.4	9.15	14.1	mA
Power Gain	PG	$f = 10.7\text{MHz}$	27	31	-	dB
Forward Transadmittance	$ y_f $	$V_{in} = 10\text{mVrms}$, $f = 10.7\text{MHz}$	-	30	-	mhos
Reverse Transadmittance	$ y_r $		-	0.002	-	mhos
Input Conductance	g_i		-	0.4	-	mhos
Input Capacitance	C_i		-	7.0	-	pF
Output Conductance	g_o		-	0.03	-	mhos
Output Capacitance	C_o		-	2.5	-	pF
Noise Figure	NF		$f = 10.7\text{MHz}$	-	6	-

Pin Connection Diagram
(Front View)

