



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

NTE1039 Integrated Circuit FM IF Amplifier

Description:

The NTE1039 is a silicon monolithic integrated circuit designed for use as a FM-IF amplifier. It features the capability of nonsaturating limiter operation with a suitable output load, rendering it ideally adaptable to FM-IF limiter applications.

Applications:

- FM-IF Limiter Amplifiers
- TV Sound IF Amplifiers
- Chroma Reference Oscillators for Color TVs

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_D 200mW
Operating Temperature Range, T_{opr} -30° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg} -55° to $+125^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Dissipation	P_D		–	110	170	mW
DC Total Current	I_r		5.4	9.15	14.1	mA
Power Gain	PG	$f = 10.7\text{MHz}$	27	31	–	dB
Forward Transadmittance	$ Y_f $	$V_{IN} = 10\text{mV}_{rms}$, $f = 10.7\text{MHz}$	–	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	–	dB

Pin Connection Diagram

