

NTE1101 Integrated Circuit General Purpose Amp, Mixer, and Oscillator

Features:

- General Amplifier Circuit
- High Frequency Amplifier
- Mixer, OSC and Modulator
- Video Amplifier
- Recommend RF and IF Amplifier (f = 0 to 100MHz)
- AGC is possible

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Supply Voltage, V _{CC}	30V
Emitter-to-Base Voltage, V _{EB}	6V
Supply Current, I _{CC}	20mA
Power Dissipation, P _D	300mW
Operating Temperature Range, T _{opr}	-20° to +75°C
Storage Temperature Range, T _{stg}	-55 to +125°C

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Maximum Collector Current	I ₁	V ₁ = V ₇ = 20V, V ₂ = 8V, V ₆ = 7.5V	5.70	7.46	9.87	mA
	I ₇	V ₁ = V ₇ = 20V, V ₂ = 7.5V, V ₆ = 8V	4.60	6.00	8.00	mA
Power Dissipation	P _D		–	–	180	mW
Power Gain	G _P	f = 58MHz	20	23	–	dB
Input Admittance Cascade Connection	Y _i	V _{CC} = 20V, f = 3.58MHz	–	0.5 +j0.6	–	mmhos
			Differential Connection	–	0.6 +j0.5	–
Reverse Transfer Admittance Cascade Connection	Y _r		–	0.0003 –j0	–	mmhos
			Differential Connection	–	0.009 –j0.0001	–
Forward Transfer Admittance Cascade Connection	Y _f		–	99 –j5.0	–	mmhos
			Differential Connection	–	–35 +j0	–
Output Admittance Cascade Connection	Y _o		–	0 +j0.07	–	mmhos
			Differential Connection	–	0.03 +j0.20	–

Pin Connection Diagram
(Front View)

