

General-purpose amplifier used in video amplifier, product and AM detector applications. 10-lead "TO-5" package; Outline No. 1. For schematic diagram and characteristics curves, see Fig. 104 and Figs. 106 through 114.

MAXIMUM RATINGS

Positive DC Supply Voltage	V_{CC}	+10	V
Negative DC Supply Voltage	V_{EE}	-10	V
Input Signal Voltage (Single-ended)		± 3.5	V
Total Device Dissipation		300	mW
Temperature Range:			
Operating		-55 to 125	°C
Storage		-65 to 200	°C

TYPICAL CHARACTERISTICS (At ambient temperature = 25°C,

$$V_{CC} = +6V, V_{EE} = -6V)$$

Input Unbalance Voltage	V_{IU}	2.2	mV
Input Unbalance Current	I_{IU}	2.2	μA
Input Bias Current	I_I	20	μA
Quiescent Operating Voltage:			
Terminal 2 connected to V_{EE} , terminal 4 not connected		2.8	V
Terminals 2 and 4 connected to V_{EE}		3.9	V
Device Dissipation	P_T	55	mW
Differential Voltage Gain (Single-Ended Input and Output, $f = 1.75$ MHz)	A_{DIFF}	24	dB
-3-dB Bandwidth	BW	11	MHz

TYPICAL CHARACTERISTICS (continued)

Maximum Output Voltage Swing	$V_{out(P-P)}$	5.5	V_{p-p}
Noise Figure ($R_s = 1\text{ k}\Omega$, $f = 1.75\text{ MHz}$) ...	NF	4	dB
Parallel Input Resistance ($f = 1.75\text{ MHz}$)	R_{in}	100	$\text{k}\Omega$
Parallel Input Capacitance ($f = 1.75\text{ MHz}$)	C_{in}	4	pF
Output Resistance ($f = 1.75\text{ MHz}$)	R_{out}	70	Ω
3rd Harmonic Intermodulation Distortion	IMD	-40	dB
Useful Frequency Range		dc to 15	MHz
AGC Range (Maximum Voltage Gain to Complete Cutoff, $f = 1.75\text{ MHz}$)	AGC	80	dB