



## Absolute Maximum Ratings

Supply Voltage	15V
Current Into Pin 14	50 mA
Power Dissipation	700 mW
Maximum Resistance Between Pins 8 and 9	20 $\Omega$
Operating Temperature Range	-25°C to +70°C
Storage Temperature Range	-65°C to +150°C
Lead Temperature (Soldering, 10 seconds)	300°C

## Electrical Characteristics (T<sub>A</sub> = 25°C, V<sub>CC</sub> = 13V, I<sub>14</sub> = 40 mA, unless otherwise specified)

PARAMETER		CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>13</sub>	Current Consumption	V <sub>13</sub> = 15V	14.5	17.5	20.5	mA
V <sub>14</sub>	Internal Supply Voltage	I <sub>14</sub> = 40 mA, V <sub>IN</sub> = 0	5.5	6.0	6.8	V
V <sub>11</sub>	DC Voltage at Output	V <sub>IN</sub> = 0	5.5	7	8.5	V
V <sub>12</sub>	DC Voltage at Output		1.7	3	4.3	V
I <sub>5</sub>	Control Current for Tuner AGC	(10 dB After Beginning of the Tuner AGC, V <sub>5</sub> ≥ 2V)	3			mA
V <sub>4</sub>	IF Control Voltage for G <sub>MAX</sub>		0		0.5	V
V <sub>4</sub>	IF Control Voltage for G <sub>MIN</sub>		2.5			V
V <sub>7</sub>	Voltage for AGC Gating Input		-5		-2	V
R <sub>10-11</sub>	Resistance for Output Voltage	V <sub>11</sub> = 3 V <sub>p-p</sub>	3	4	10	k $\Omega$
I <sub>11</sub> , I <sub>12</sub>	Available Output Current to Ground				5	mA
I <sub>11</sub> , I <sub>12</sub>	Available Output Current to V <sub>CC</sub> +		-1			mA
Z <sub>1-16</sub>	Input Impedance at G <sub>MAX</sub>			1.8/2		k $\Omega$ /pF
Z <sub>1-16</sub>	Input Impedance at G <sub>MIN</sub>			1.9/0		k $\Omega$ /pF
V <sub>IN</sub>	Input Voltage	V <sub>11</sub> = 2 V <sub>p-p</sub> , (Note 1)		100		$\mu$ V
V <sub>IN</sub>	Input Voltage	V <sub>11</sub> = 3 V <sub>p-p</sub> , (Note 1)		150		$\mu$ V
B <sub>VIDEO</sub>	Video Bandwidth			9		MHz
G <sub>V</sub>	AGC Range		50	55		dB
	Sound/Chroma Intermodulation Products	(Note 2)	-40			dB

**Note 1:** RMS of sync tip voltage, see test circuit.

**Note 2:** Sound subcarrier—24 dB  
Color subcarrier—2 dB