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## NTE1492 Integrated Circuit TV Video IF Amp

**Features:**

- Particularly useful in B/W TV's with bipolar tuners
- Low external parts count
- Designed to operate at  $V_{CC}$  down to 6.5V
- Video output level stabilized, independent of supply voltage and ambient temperature

**Functions:**

- Picture IF Amplifier
- Video Detector
- AGC Detector
- Noise Canceller
- Forward AGC
- Sync. Separator

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

Supply Voltage (Note 1), $V_{CC}$ .....	15V
Max. Input Voltage, $V_{INmax}$ .....	$3V_{p-p}$
Video Output Current, $I_{11}$ .....	3mA
Max. Applicable Voltage	
Pins 3 & 4, $V_3, V_4$ .....	$V_{CC}$
Pin 6, $V_6$ .....	6.3V
Power Dissipation ( $T_A = 60^\circ\text{C}$ ), $P_D$ .....	850mW
Operating Ambient Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+65^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+150^\circ\text{C}$

Note 1. Value at  $t \leq 60\text{sec. min.}$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Sensitivity	$V_{i(sens)}$	$m = 87.5\%$	37	42	47	dB $\mu$
Video Output Voltage	$V_{out}$	$V_{in} = 10_m V_{rms}, m = 87.5\%$	0.95	1.21	1.47	$V_{p-p}$
Min. RF AGC Voltage	$V_{3min}$	$V_{in} = 0$	1.6	1.8	2.0	V
Max. RF AGC Voltage	$V_{3max}$	Pin 4 to GND	6.0	7.0	8.0	V
Sync. Separated Output	$V_{11}$	Vertical Sync. Pulse	9.0	10.3	–	V
Video Band Width	$G_W$	$V_{out} = \{f = 6\text{MHz}\}/V_{out}\{f = 100\text{kHz}\}$	–13	–6	–1	dB
Sync. Tip Voltage	$V_{sync}$	$V_{in} = 10_m V_{rms}$	4.64	5.14	5.64	V
Supply Current	$I_{CC}$	$V_{in} = 0$	33	41	53	mA

### Pin Connection Diagram

