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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° to $+65^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° 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 μ
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

