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## NTE1618 Integrated Circuit TV Video IF Amp/AGC

### **Features:**

- Good noise characteristics in strong signal condition made possible by IF AGC delayed operation inside circuit.
- Wide range of gain reduction and IF AGC.

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

Supply Voltage, $V_{CC}$ .....	13.2V
Supply Current, $I_{CC}$ .....	29mA
Power Dissipation, $P_D$ .....	383mW
Operating Ambient Temperature Range, $T_{opr}$ .....	-20° to +70°C
Storage Temperatuere Range, $T_{stg}$ .....	-40° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	$I_{tot}$	$V_{CC} = 11\text{V}$	14	19	24	mA
Transfer Admittance	$ Y_2 $	$f = 58.75\text{MHz}$	50	120	200	mS
AGC Range	$H_{AGC}$		60	-	-	dB
Input Resistance	$R_i$	$f = 58.75\text{MHz}, V_i = 30_m\text{V}_{rms}$	-	2	-	kΩ
Input Capacitance	$C_i$		-	7.5	-	pF
Output Capacitance	$C_o$		-	4	-	pF
Noise Figure	NF		-	9	-	dB
Voltage Gain (RF AGC)	$G_V$		105	130	150	times
Upper Voltage (RF AGC)	$V_{(Upper)}$	$V_{CC} = 11\text{V}, V_{3-5} = 4.5\text{V}$	8.3	8.8	9.3	V
Lower Voltage (RF AGC)	$V_{(Lower)}$	$V_{CC} = 11\text{V}, V_{3-5} = 3\text{V}$	-	-	0.1	V

**Pin Connection Diagram**  
(Front View)

<b>9</b>	VIF Output
<b>8</b>	V <sub>CC</sub>
<b>7</b>	Decoupling
<b>6</b>	RF AGC Output
<b>5</b>	GND
<b>4</b>	RF AGC Reference Voltage
<b>3</b>	AGC Voltage Input
<b>2</b>	Decoupling
<b>1</b>	VIF Input

