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## NTE1046 Integrated Circuit TV AFC Circuit

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

Supply Voltage, $V_{CC}$ .....	20V
Input Voltage, $V_{IN}$ .....	$7V_{p-p}$
Supply Current, $I_{CC}$ .....	30mA
Power Dissipation ( $T_A = 70^\circ\text{C}$ ), $P_D$ .....	360mW
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+75^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-40^\circ$ to $+125^\circ\text{C}$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 16V$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	$I_{CC}$		13	16	19	mA
Circuit Current	$I_{10}$		1.3	1.75	2.2	mA
Voltage Gain	$A_{vIF}$	$f = 58\text{MHz}$ , $R_L = 1k\Omega$ , $V_i = 1_mV_{rms}$	25	29	-	dB
Input Limit Voltage	$V_{i(lim)}$	$f = 58\text{MHz}$ , $R_L = 1k\Omega$	-	20	50	$mV_{rms}$
DC Voltage Gain	$A_{VDC}$	$f = 58.75\text{MHz}$ , $\Delta f = 100\text{kHz}$ , $f_M = 400\text{Hz}$ , $V_i = 1_mV_{rms}$	-	35	-	dB
Circuit Voltage	$V_8$		12.3	13.0	13.7	V
	$V_2$		6	7	8	V
	$V_3$		6	7	8	V

**Pin Connection Diagram**  
(Front View)



