

NTE1400 Integrated Circuit FM Limiter Circuit

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

Supply Voltage (V_{12-4}), V_{CC}	15.6V
Supply Current, I_{CC}	30mA
Power Dissipation, P_D	490mW
Operating Temperature Range, T_{opr}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+150^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = V_{12-4} = 12\text{V}$, $T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	I_{12}		15	25	30	mA
Output Amplitude	$V_{8(P-P)}$	$V_{14} = 0$ to 6.3V	1.0	1.2	-	V
Voltage Gain for Reference Wave	G_V	$f = 4\text{MHz}$, $V_i = 0.14\text{mV}_{P-P}$	1.0	-	-	V_{P-P}
2 nd Harmonics Attenuation	$V_{O(f)}/V_{O(2f)}$	$f = 4\text{MHz}$, $V_i = 100\text{mV}_{P-P}$	40	-	-	dB
		$V_{12} = 9\text{V}$, $f = 6\text{MHz}$, $V_i = 10\text{mV}_{P-P}$	40	-	-	dB
		$f = 4\text{MHz}$, $V_i = 1.0\text{V}_{P-P}$	40	-	-	dB
		$f = 4\text{MHz}$, $V_i = 100\text{mV}_{P-P}$, $T_A = +70^\circ\text{C}$	-	41	-	dB
		$f = 4\text{MHz}$, $V_i = 100\text{mV}_{P-P}$, $T_A = -20^\circ\text{C}$	-	48	-	dB
DC Current Gain (T30)	$h_{FE(T30)}$	$V_{7-4} = 5\text{V}$, $V_{6-4} = 0.7\text{V}$, $I_5 = -1\text{mA}$	40	-	200	

Pin Connection Diagram

