

NTE1217 Integrated Circuit Phase Lock Loop (PLL) FM Multiplex Stereo Demodulator

Features:

- Low Level of Pilot Signal Sensitivity: 7mV
- Gain: 0dB ($R_L = 3.3k\Omega$)
- Separation Adjustable
- Low Level of Pop Noise
- Excellent SCA Rejection Ratio

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

Supply Voltage, V_{CC}	
V_{6-7}	18V
V_{1-7}	16V
Lamp Current, I_L	100mA
Power Dissipation, P_d	400mW
Operating Temperature Range, T_{opr}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+125^\circ\text{C}$

Recommended Operating Conditions: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

DC Supply Voltage, V_{CC}	8V to 12V
Input Signal, V_{IN}	200mV to 300mV

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Current	I_{CCO}		–	16	25	mA
Input Resistance	r_i		15	20	–	$k\Omega$
Channel Separation	Sep		35	42	–	dB
Total Harmonic Distortion (Stereo)	THD	SUB, $V_{IN} = 100\text{mV}$ (L + R)	–	0.25	0.5	%
Output Voltage	V_O	$V_{IN} = 100\text{mV}$	69	100	137	mV
Channel Balance	CB		–	0.5	1.5	dB
Lamp Sensitivity	V_L	L + R = 90%, Pilot = 10%	–	65	–	mV
Hysteresis	V_H		–	–	6	dB
Capture Range	CR	Pilot = 10mV	± 1	–	–	%
SCA Rejection	SCA Rej	L + R = 80%, Pilot = 10%, SCA = 10%	–	80	–	dB

Pin Connection Diagram

