ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

NTE1812
Integrated Circuit
Capstan Interface Circuit for VCR

Description:

The NTE1812 is an integrated circuit in a 20–Lead DIP type package designed for VCR capstan interface.

Features:

- The Functions Consist of:
  - FG Amplifier
  - 2H/4H/6H Automatic Detector
  - FG Divider
  - Gain Automatic Change Circuit
- Supply Voltage: 5V

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Supply Voltage, V_{CC} 6.0V
Power dissipation (T_A = +70°C), P_D 100mW
Operating Ambient Temperature Range, T_{opr} . . . . . –20° to +70°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

Electrical Characteristics: (V_{CC} = 5V, T_A = +25°C ±2°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Circuit Current	I_{18}	V_{REF} = 2.5V	7	–	14	mA
FG Amp Input Sensitivity	S_{19}		30	–	–	mV
FG High–Level Frequency Dividing Output	V_{OH17}		4.6	–	–	V
FG Low–Level Frequency Dividing Output	V_{O17}		–	–	4.0	V
A/B High–Level Output	$V_{OHA, B}$	–I = 2mA	3.3	–	–	V
A/B Low–Level Output	$V_{OLA, B}$		–	–	0.4	V
Playback CTL Input Sensitivity	S_{16}		3.0	–	–	V
Mode Select Sensitivity Record/Playback PAL/MTSCX 1/2, C, A, B	$S_{(MODE)}$		3.0	–	–	V
OP Amp. 3 High–Level Output	V_{OH11}		3.8	–	–	V
OP Amp. 3 Low–Level Output	V_{OL11}		–	–	1.1	V
Total Offset OP. Amp. NTSC 2H	$V_{O(offset)2}$		–	–	30	mV
Total Offset OP. Amp NTSC 6H	$V_{O(offset)6}$		–	–	30	mV
OP. Amp. 2 Gain	G_{V2}		–4	–	+2	dB

Note 1. Operating Supply Range $V_{CC(opr)}$ = 4.5V to 5.5V

Pin Connection Diagram



