ELECTRONICS, INC.
44 FARRAND STREET
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NTE1629
Integrated Circuit
TV Sync Separator Detector

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

Supply Voltage, V_{CC} 13.2V
Supply Current, I_{CC} 50mA
Power Dissipation, P_D 660mW
Operating Ambient Temperature Range, T_{opr} . . . . . –20° to +70°C
Storage Temperatuere Range, T_{stg} . . . . . –40° to +150°C

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	I_{tot}	V_{CC} = 11V	25	32	39	mA
Sync. Sep. Pulse Width	$t_{(sync)}$	Video Input Signal 4.5µs, APL = 50%, 1.5$V_{P–P}$	4.1	4.7	5.3	µs
Sync. Sep. Amplification	$v_{(sync)}$		9.0	–	–	V
Horiz OSC Starting Voltage	$V_{OSC–(H)}$	f_{HO} = 11kHz to 19kHz	3.0	–	–	V
Horiz Pulse Width (Duty)	t_{HO}	V_{CC} = 11V	28.5	33.0	38.0	%
Horiz OSC Frequency	f_{HO}	V_{CC} = 11V	15.0	15.75	16.5	kHz
f_{HO} Change with Supply Voltage	$\Delta f_{HO}/V_{CC}$	f_{HO} |8.8V – f_{HO}| 11V	–	–	130	Hz
f_{HO} Change with Ambient Temperature	$\Delta f_{HO}/T_A$	f_{HO} |–20° – f_{HO}| 60°C	–	–	260	Hz
Frequency Change with Ambient Temperature	β	ΔI_O = ±25µA	14.6	15.6	16.6	Hz/µA
OSC Output Saturation Voltage	$V_{7–5}$	V_{CC} = 11V, I_1 = 3µA	–	1.2	2.0	V
OSC Output Driving Current	I_7	V_{CC} = 11V, $V_{8–9}$ = 9V	300	–	–	mA
DC Loop Gain	f_{DC}	µ x β	–	620	–	Hz/µs

Pin Connection Diagram
(Front View)