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NTE7056
Integrated Circuit
Vertical Deflection Output Circuit for Color TV

DISCONTINUED

Description:

The NTE7056 is an integrated circuit in a 9–Lead SIP type package designed for use as a vertical deflection output circuit for 9" to 21" color television sets. This device requires no voltage–boosted pulses and can therefore be connected to a chrominance–video deflection IC such as the NTE1793, deflection ICs such as the NTE1664, or similar devices. The package is designed for one–point fixing, reducing installation man–hours.

Features:

- Requires High Power Voltage Only During Flyback Time, Greatly Reducing Power Consumption.
- Deflection Control in the Preceding Stage can be used both by Discrete Components and ICs.

Absolute Maximum Ratings: (T_A = +25°C, Note 1 unless otherwise specified)

Power Supply Voltage (V_7), V_{CC} 30V
Circuit Current, I_{CC} 350mA
Deflection Circuit Voltage, V_4 . . . . . 65V
Deflection Input Signal Voltage, V_5 . . . . . 2.5V
Voltage Booster Output Current, I_8 . . . . . –1.1 to +1.1A_{peak}
Voltage Booster Output Voltage, V_8 . . . . . V_7V
Allowable Loss, P_D 6W
Operating Temperature Range, T_{opr} . . . . . –20° to +75°C
Junction temperature, T_j . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –40° to +150°C
Thermal Resistance, Junction–to–Case, R_{thJC} . . . . . 6°C/W

Note 1. A positive current flows into the IC, a negative current flows out of it.

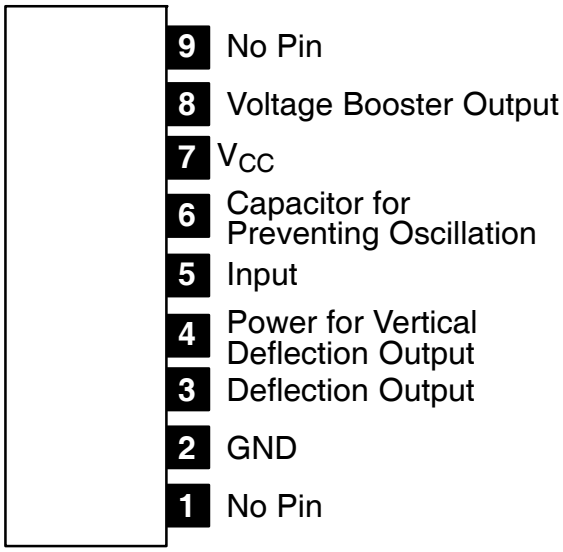
Recommended Operating Range: (T_A = +25°C unless otherwise specified)

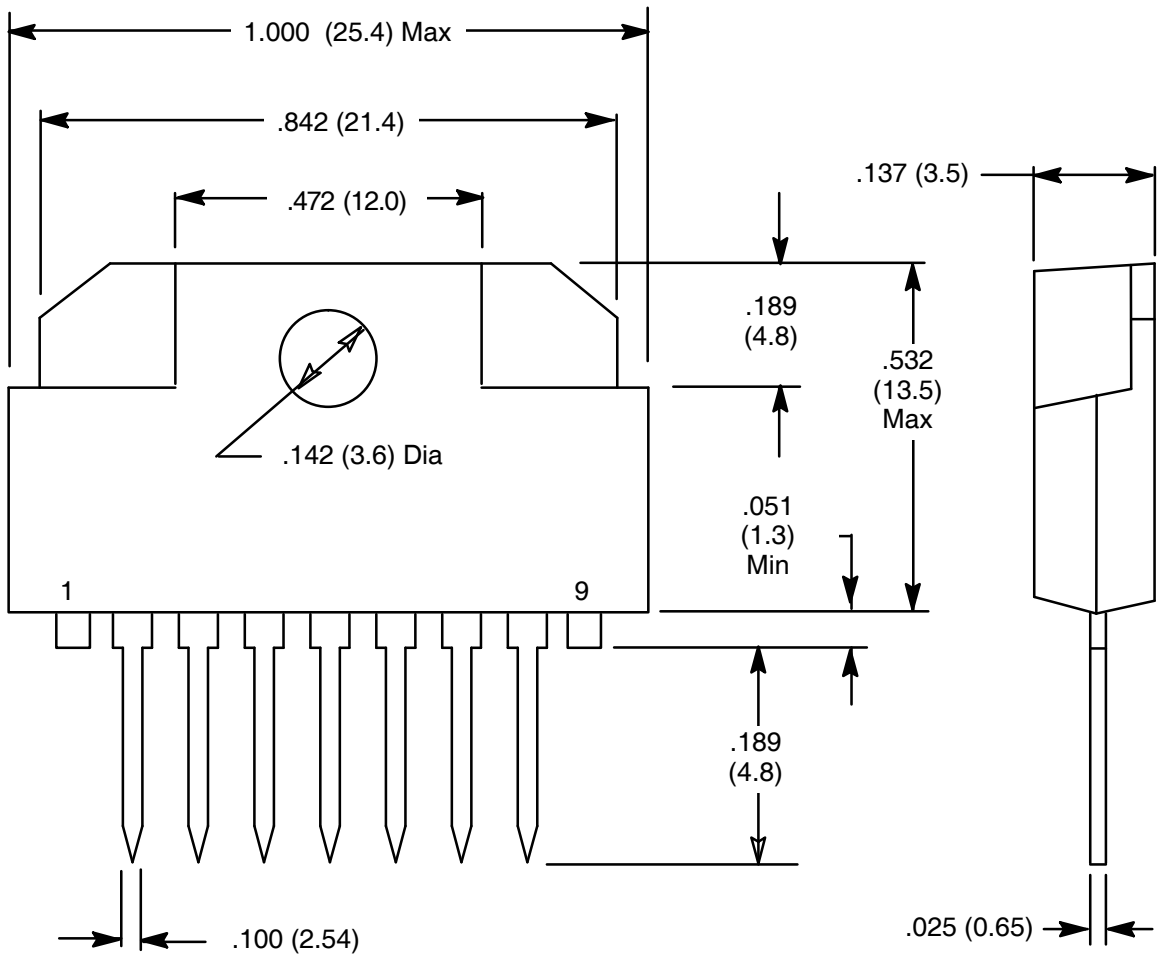
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Supply Voltage	V_{CC}		20	24	27	V
Deflection output current	I_{DEF}		0.8	–	1.4	A_{p-p}

Electrical Characteristics: (T_A = +25°C, V_{CC} = 24V, R_L = 9Ω, 22mH unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Supply Current	I_{CC}	I_{DEF} = 1.3A Typ	170	190	210	mA
Deflection Voltage	I_{DEF}		1.2	1.3	1.4	A_{P-P}
Neutral Point Potential	V_{ODC}		10	12	14	V
Flyback Pulse Voltage	RPV		46	49	54	V
Blanking Pulse Width	RPW		850	1000	1200	μs
Idling Current	I_Q		8	15	24	mA
Voltage Booster Discharge Saturation Voltage	V_{S7-8}		–	1.4	2.0	V
Voltage Booster Charge Saturation Voltage	V_{S8-2}		–	1.0	1.5	V
Voltage Booster Charge Current	I_8		55	85	120	mA
Deflection Circuit Output Saturation Voltage	V_{S3-2}		–	0.8	1.8	V
	V_{S4-3}		–	2.0	3.0	V
Deflection Circuit Input Saturation Voltage	V_5		0.85	1.00	1.15	V
Voltage Gain	A_{VO}	R_L = ∞	–	55	–	dB
Input Resistance	R_{in}		–	22	–	kΩ

Pin Connection Diagram
(Front View)




1.000 (25.4) Max
.842 (21.4)
.472 (12.0)
.137 (3.5)
.189
(4.8)
.532
(13.5)
Max
.142 (3.6) Dia
.051
(1.3)
Min
1
9
.189
(4.8)
.100 (2.54)
.025 (0.65)