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NTE7167
Integrated Circuit
Vertical Deflection Output Circuit

Description:

The NTE7167 is a vertical deflection output integrated circuit in a 7-Lead SIP type package designed for use in high-resolution television and CRT display systems that use a bus controller system signal processing IC. It can directly drive the deflection yoke (including the required DC component) from the bus controller system signal processing IC's sawtooth waveform output. Since the NTE7167 has a maximum deflection current of $2.2A_{P-P}$, it is optimal for use in large aperture products, and is capable of driving 33 to 37 inch class monitors.

Features:

- Low Power Dissipation due to the Provision of a Built-In Pump Circuit
- Vertical Output Circuit
- On-Chip Thermal Protection Circuit
- Good Crossover Characteristics
- Supports DC Coupling

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

Maximum Supply Voltage, $V_{CC}6$ max 40V
Output Block Supply Voltage, $V_{CC}3$ max 85V
Deflection Output Current, I_2max . . . . . -1.5 to $+1.5A_{P-P}$
Allowable Power Dissipation (With an arbitrarily large heatsink), $P_d$max 11W
Operating Temperature Range, T_{opr} . . . . . -20° to +85°C
Storage Temperature Range, T_{stg} . . . . . -40° to +150°C
Thermal Resistance, Junction-to-Case, R_{thJC} . . . . . 4.0°C/W

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Recommended Supply Voltage	$V_{CC}6$		-	24	-	V
Operating Supply Voltage Range	$V_{CC}6$ op		10	-	38	V
Recommended Deflection Output Current	I_{2P-P}		-	-	2.2	A_{P-P}

Electgrical Characteristics: (T_A = +25°C, V_{CC}6 = 24V unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Pump Circuit Charge Saturation Voltage	V_{S7-1}	I_7 = 20mA	-	-	1.8	V
Pump Circuit Discharge Saturation Voltage	V_{S6-7}	I_7 = -1.1A	-	-	3.2	V
Deflection Output Saturation Voltage (Lower)	V_{S2-1}	I_2 = 1.1A	-	-	1.5	V
Deflection Output Saturation Voltage (Upper)	V_{S3-2}	I_2 = -1.1A	-	-	3.5	V
Idling Current	I_{DL}		35	-	70	mA
Midpoint Voltage	V_{MID}		11	12	13	V

Pin Connection Diagram
(Front View)



