



Vertical Deflection Output Circuit

Overview

The LA7845 is a vertical deflection output IC for 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. Connecting the LA7845 and a Sanyo TV bus control system signal processing IC in the LA7615 series allows all functions of a color television signal system to be processed by the bus system. Since the LA7845 has a maximum deflection current of 2.2 Ap-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

Specifications

Maximum Ratings at $Ta = 25^{\circ}C$

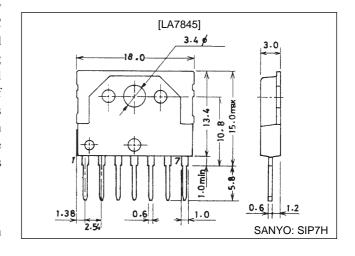
Parameter Symbol Conditions Ratings Unit Maximum supply voltage V_{CC}6 max V_{CC}3 max Output block supply voltage Deflection output current I2 max -1.5 to +1.5 Ар-о Thermal resistance 4.0 °C/W θј-с Allowable power dissipation Pd max With an arbitrarily large heat sink W °C Operating temperature Topr -20 to +85 -40 to +150 °C Storage temperature Tstg

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Package Dimensions

unit: mm

3075-SIP7H



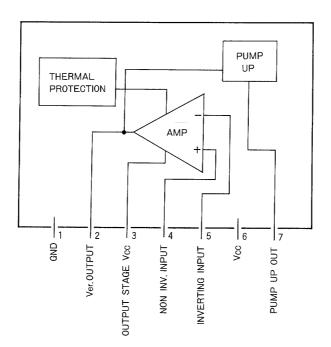
Operating Conditions at $Ta = 25^{\circ}C$

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V _{CC} 6		24	V
Operating supply voltage range	V _{CC} 6 op		10 to 38	V
Recommended deflection output current	I2 p-p		up to 2.2	Ар-р

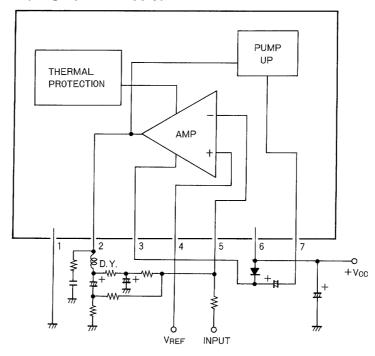
Operating Characteristics at $Ta=25^{\circ}C,\,V_{CC}6=24~V$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Pump circuit charge saturation voltage	V _S 7-1	I7 = 20 mA			1.8	V
Pump circuit discharge saturation voltage	V _S 6-7	I7 = −1.1 A			3.2	V
Deflection output saturation voltage (lower)	V _S 2-1	I2 = 1.1 A			1.5	V
Deflection output saturation voltage (upper)	V _S 3-2	I2 = -1.1. A			3.5	V
Idling current	I _{DL}		35		70	mA
Midpoint voltage	V_{MID}		11.0	12.0	13.0	V

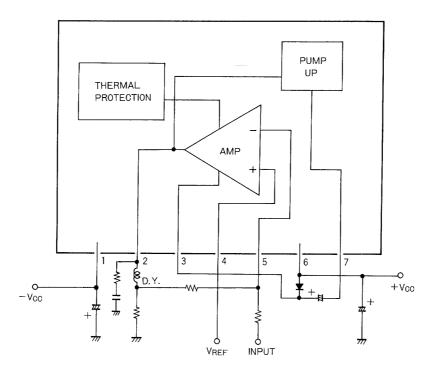
Block Diagram

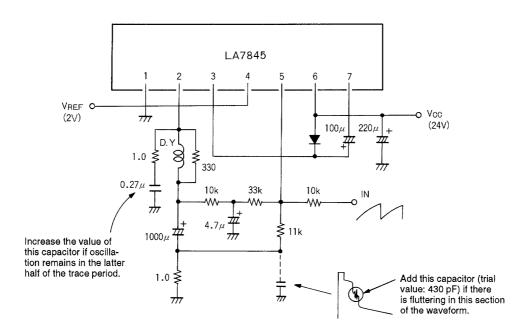


Sample Application Circuit (Single power supply)



Sample Application Circuit (Dual power supply)





Unit (resistance: Ω , capacitance: F)

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