

SANYO**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

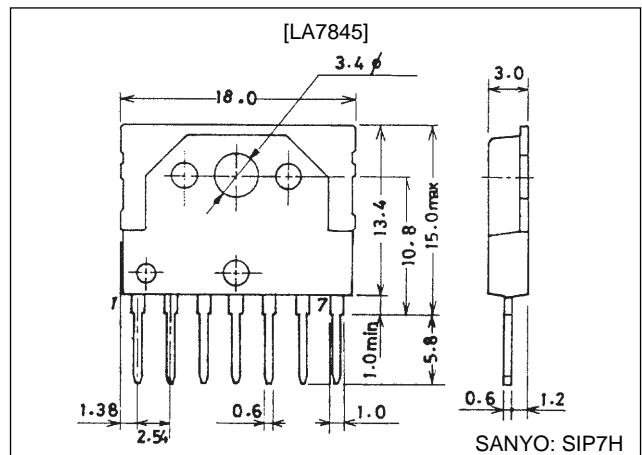
- Low power dissipation due to the provision of a built-in pump circuit
- Vertical output circuit
- On-chip thermal protection circuit
- Good crossover characteristics
- Supports DC coupling

Specifications**Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V _{CC6} max		40	V
Output block supply voltage	V _{CC3} max		85	V
Deflection output current	I ₂ max		-1.5 to +1.5	Ap-o
Thermal resistance	θ _{j-c}		4.0	°C/W
Allowable power dissipation	P _d max	With an arbitrarily large heat sink	11	W
Operating temperature	T _{opr}		-20 to +85	°C
Storage temperature	T _{stg}		-40 to +150	°C

Package Dimensions

unit: mm

3075-SIP7H

■ Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your SANYO representative nearest you before using any SANYO products described or contained herein in such applications.

■ SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

SANYO Electric Co., Ltd. Semiconductor Business Headquarters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

LA7845

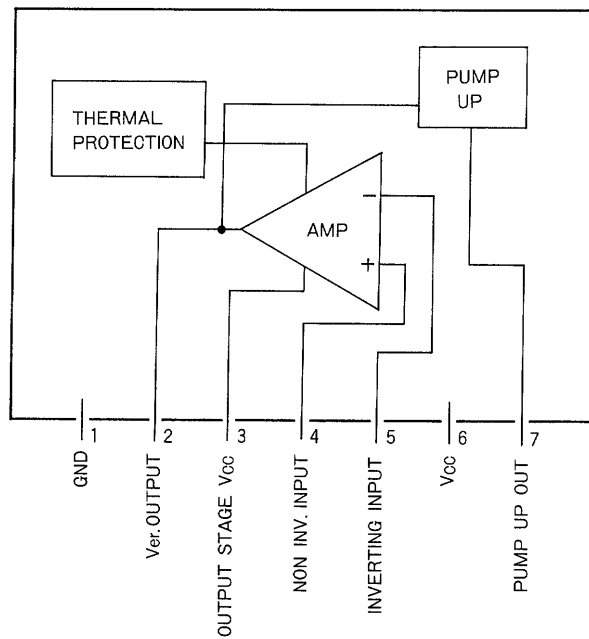
Operating Conditions at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V_{CC6}		24	V
Operating supply voltage range	$V_{CC6\text{ op}}$		10 to 38	V
Recommended deflection output current	$I_2\text{ p-p}$		up to 2.2	Ap-p

Operating Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC6} = 24\text{ V}$

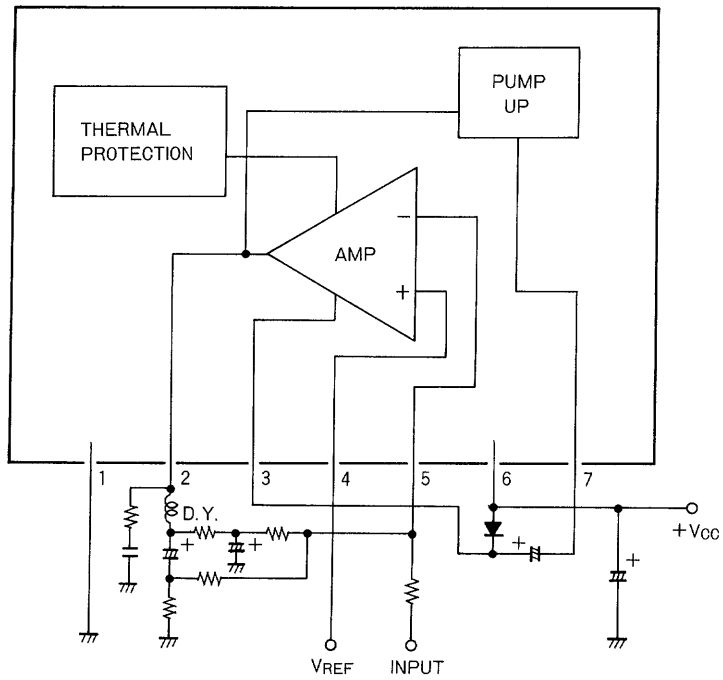
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Pump circuit charge saturation voltage	V_{S7-1}	$I_7 = 20\text{ mA}$			1.8	V
Pump circuit discharge saturation voltage	V_{S6-7}	$I_7 = -1.1\text{ A}$			3.2	V
Deflection output saturation voltage (lower)	V_{S2-1}	$I_2 = 1.1\text{ A}$			1.5	V
Deflection output saturation voltage (upper)	V_{S3-2}	$I_2 = -1.1\text{ A}$			3.5	V
Idling current	I_{DL}		35		70	mA
Midpoint voltage	V_{MID}		11.0	12.0	13.0	V

Block Diagram



LA7845

Sample Application Circuit (Single power supply)



Sample Application Circuit (Dual power supply)

