



LA7832

Color TV Vertical Deflection Output Circuit

Overview

The LA7832 is a monolithic linear IC for vertical deflection output for small and mid-sized color television sets that requires few external components and dissipates little power. When used in conjunction with the LA7620 series of video chroma deflection ICs, the LA7800 series of deflection ICs, and the LA7850 series of display ICs, it is possible to create a stable and compact vertical output deflection circuit.

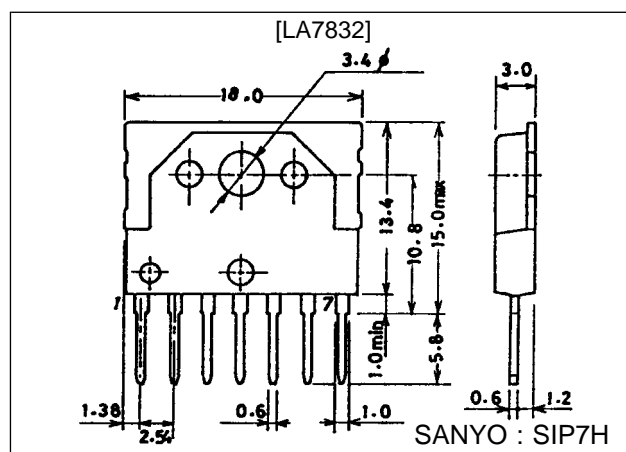
Features

- High output.
- Low power dissipation due to built-in pump-up circuit.
- Few external components needed.
- Thermal protection circuit built in.

Package Dimensions

unit : mm

3075-SIP7H



Specifications

Maximum Ratings at Ta = 25 °C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V ₆ max	(Pump-up block)	30	V
	V ₃ max	(Output block)	62	V
Deflection output current	I ₂ max		±1.5	Ap-o
Allowable power dissipation	Pd max	With arbitrarily large heat sink	8	W
Operating temperature	T _{opr}		-20 to +85	°C
Storage temperature	T _{stg}		-40 to +150	°C
Thermal resistance	θ _{j-c}		4	°C/W

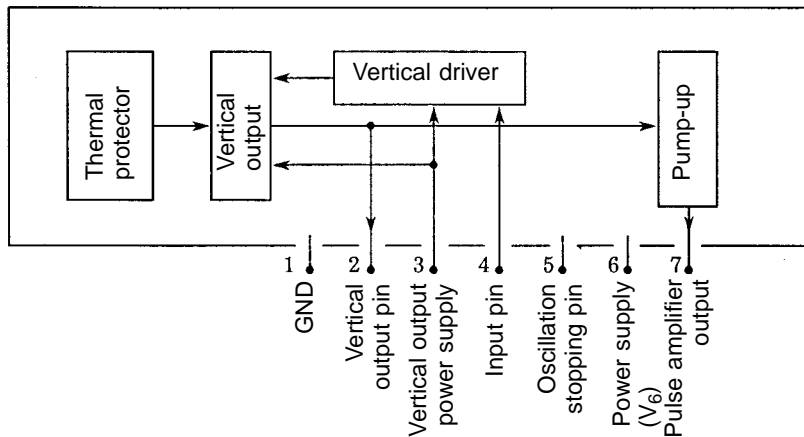
Operating Conditions at Ta = 25 °C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V ₆		24	V
Operating supply voltage range	V ₆		10 to 27	V
Deflection output current	I _{2p-p}		to 1.8	Ap-p

Operating Characteristics at Ta = 25 °C, V₆ = 24 V

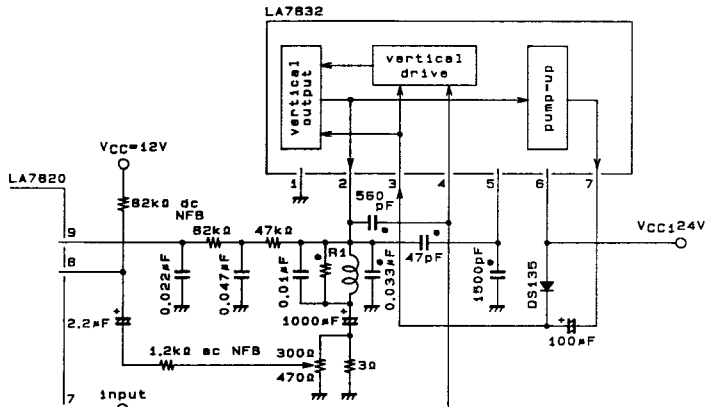
Parameter	Symbol	Conditions	min	typ	max	Unit
Deflection output saturation voltage (lower)	V _{(sat)2-1}	I ₂ = +0.9 A			1.2	V
Deflection output saturation voltage (upper)	V _{(sat)3-2}	I ₂ = -0.9 A			3.2	V
Pump-up charge saturation voltage	V _{(sat)7-1}	I ₇ = +20 mA			1.8	V
Pump-up discharge saturation voltage	V _{(sat)6-7}	I ₇ = -0.9 A			3.0	V
Idling current	I _{DL}		30		60	mA
Midpoint voltage	V _{MID}		9.5	10.5	11.5	V

Pin Assignment and Functional Block Diagram



Sample Application Circuit

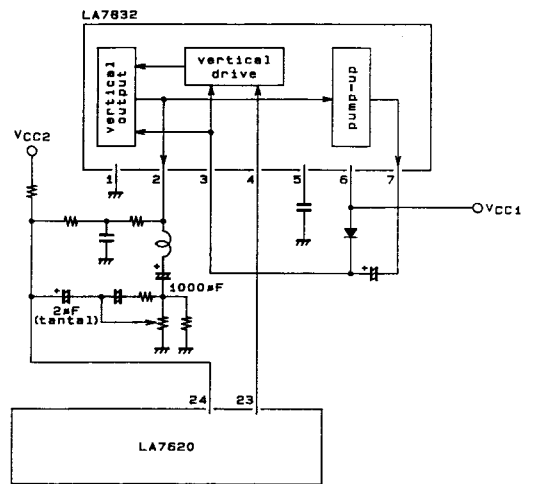
LA7820 vertical output



R1* = several hundreds of ohms to 1 kΩ
 *: CR used against oscillation
 The combination depends on the oscillation mode.

Sample Application Circuit

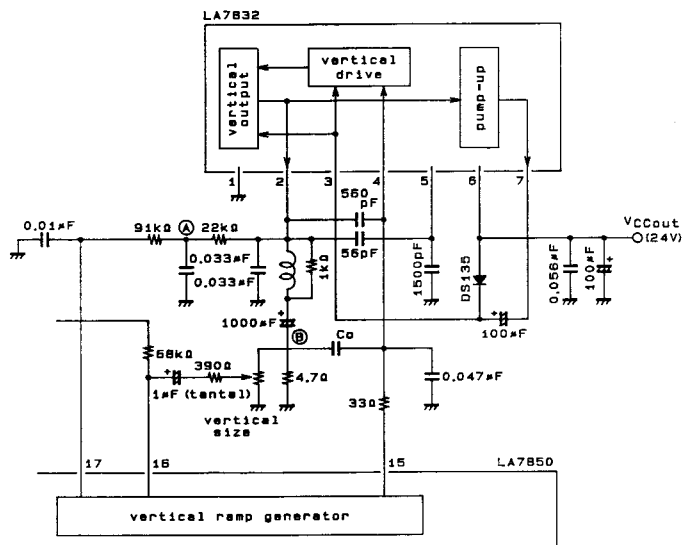
LA7620 vertical output



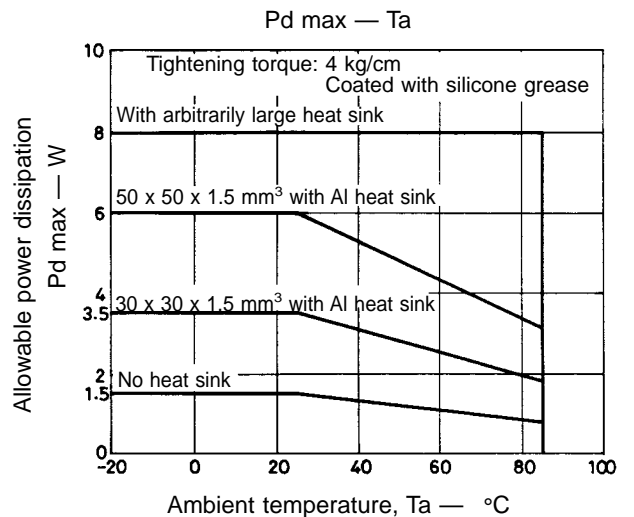
A04085

Sample Application Circuit

LA7850 vertical output



A04086



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of May, 1995. Specifications and information herein are subject to change without notice.