

**SANYO****LA7833****Color TV Vertical Deflection Output Circuit****Overview**

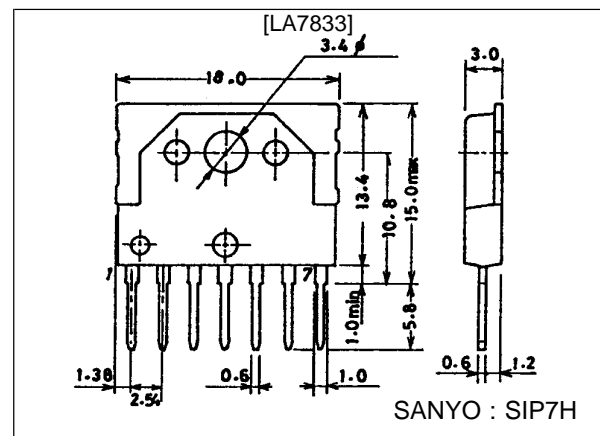
The LA7833 is a monolithic linear IC for vertical deflection output for large color television sets that requires few external components and dissipates little power. When used in conjunction with the LA7620 series of video chroma deflection ICs, the LA7800 series of deflection ICs, and the LA7850 series 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 <sub>6</sub> max	(Pump-up block)	30	V
	V <sub>3</sub> max	(Output block)	62	V
Deflection output current	I <sub>2</sub> max		±1.5	Ap-o
Allowable power dissipation	Pd max	With arbitrarily large heat sink	8.0	W
Operating temperature	T <sub>opr</sub>		-20 to +85	°C
Storage temperature	T <sub>stg</sub>		-40 to +150	°C
Thermal resistance	θj-c		4	°C/W

**Operating Conditions at Ta = 25 °C**

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V <sub>6</sub>		24	V
Operating supply voltage range	V <sub>6</sub>		10 to 27	V
Deflection output current	I <sub>2p-p</sub>		to 2.2	Ap-p

**Operating Characteristics at Ta = 25 °C, V<sub>6</sub> = 24 V**

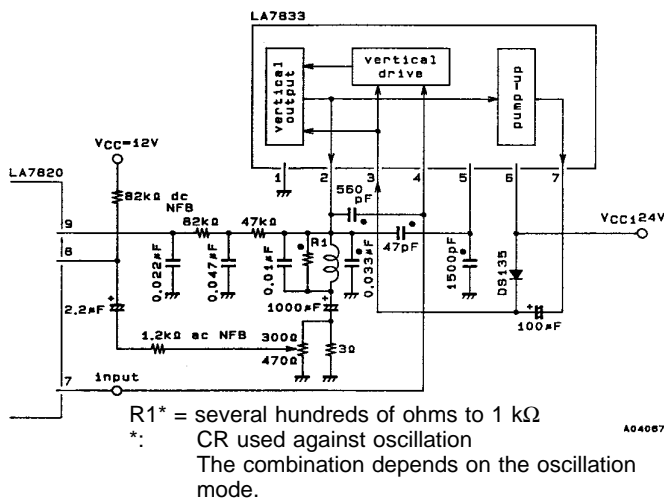
Parameter	Symbol	Conditions	min	typ	max	Unit
Deflection output saturation voltage (lower)	V <sub>(sat)2-1</sub>	I <sub>2</sub> = +1.1 A			1.5	V
Deflection output saturation voltage (upper)	V <sub>(sat)3-2</sub>	I <sub>2</sub> = -1.1 A			3.5	V
Pump-up charge saturation voltage	V <sub>(sat)7-1</sub>	I <sub>7</sub> = +20 mA			1.8	V
Pump-up discharge saturation voltage	V <sub>(sat)6-7</sub>	I <sub>7</sub> = -1.1 A			3.2	V
Idling current	I <sub>DL</sub>		30		60	mA
Midpoint voltage	V <sub>MID</sub>		9.5	10.5	11.5	V

**SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquarters**

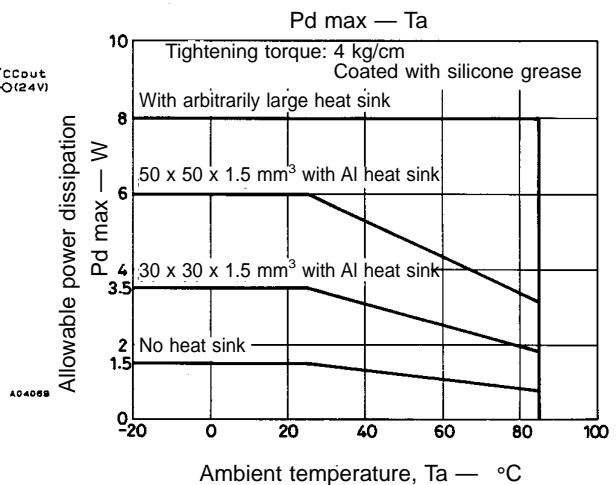
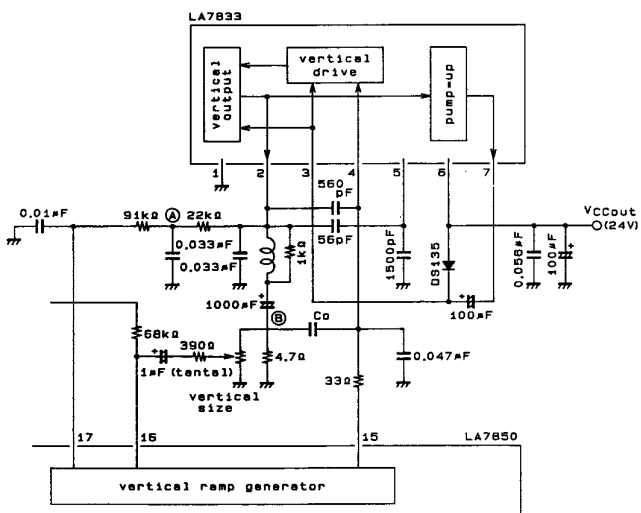
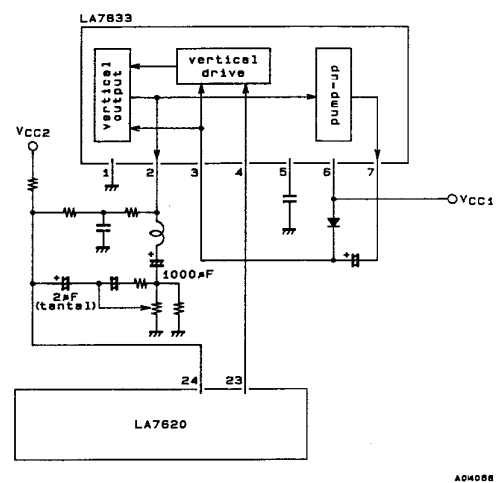
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LA7620 vertical output



LA7850 vertical output



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