Ordering number : EN7881A

SANYO Semiconductors
DATA SHEET

Monolithic Linear IC

LA78045 — TV and CRT Display Vertical Output IC with Bus Control Support

Overview

The LA78045 is a vertical deflection output IC for high image quality TV and CRT displays that supports the use of a bus control system signal-processing IC. The sawtooth waveform from the bus control system signal-processing IC can directly drive the deflection yoke (including the DC component). Color TV vertical deflection system adjustment functions can be controlled over a bus system by connecting the LA78045 to a Sanyo LA768X series or LA769XX series bus control system signal-processing IC.

Functions

- Built-in pump-up circuit for low power dissipation.
- Vertical output circuit.
- Thermal protection circuit.

Specifications

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Pump-up block supply voltage	+B2 max		45	V
Output block supply voltage	+B6 max		92	V
Allowable power dissipation	Pd max	Mounted on an arbitrarily large heat sink.	9	W
Deflection output current	I5 max		-1.5 to +1.5	Ap-o
Thermal resistance	θj-c		3	°C /W
Operating temperature	Topr		-20 to +85	°C
Storage temperature	Tstg		-40 to +150	°C

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Operating Conditions at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	+B2		30	V
Operating supply voltage range	+B2op		16 to 43	V
Deflection output current	I5p-p		To 2.2	Ap-p

Operating Characteristics at Ta = 25°C, +B2 = 24V

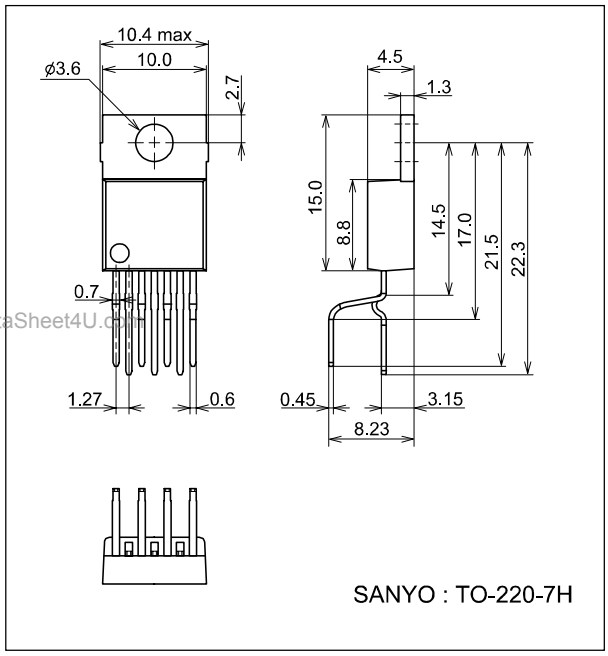
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Deflection output saturation voltage (lower)	Vsat5-4	I5 = 1.1A			1.5	V
Deflection output saturation voltage (upper)	Vsat6-5	I5 = -1.1A			3.5	V
Pump-up charge saturation voltage	Vsat3-4	I3 = 20mA			1.8	V
Pump-up discharge saturation voltage	Vsat2-3	I3 = -1.1A			3.2	V
Idling current	Idl		20		50	mA
Midpoint voltage	Vmid		14.0	15.0	16.0	V

Note: Current flowing into the IC is positive (+) and current flowing out is negative (-).

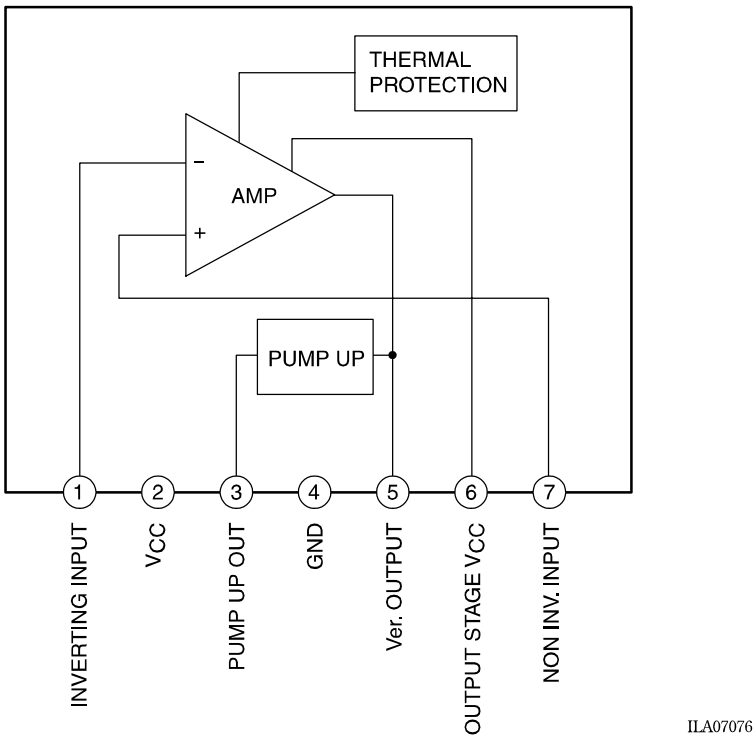
Package Dimensions

unit : mm

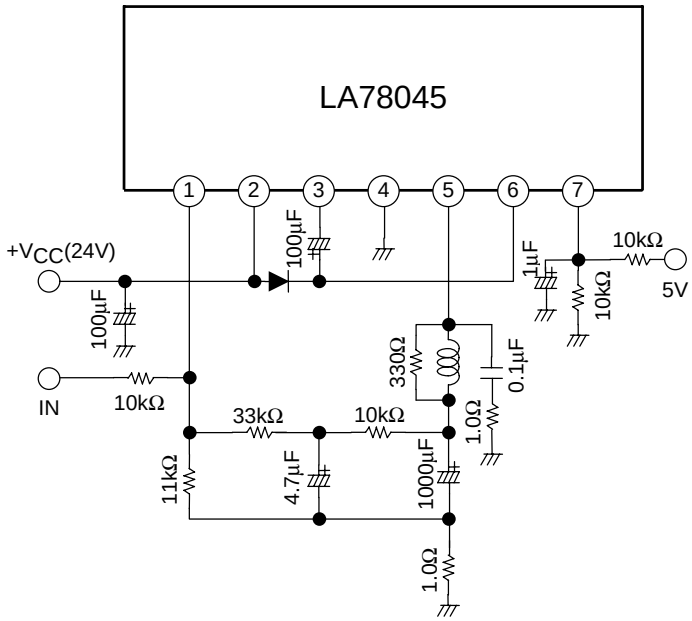
3286



Block Diagram



Application Circuit Example 1 (Single power supply)



Application Circuit Example 2 (Dual power supply)