

SANYO Semiconductors **DATA SHEET**

Monolithic Linear IC

LA78040B

The Vertical Deflection Output IC With Bus Control Support for TVs and CRT Display

Overview

The LA78040B is a vertical deflection output IC for TVs and CRT displays with excellent image quality that use a BUS control system signal processing IC. This IC can drive the direct (even including a DC component) deflection yoke with the saw tooth wave output from the BUS control system signal processing IC.

Functions

- Low power dissipation due to built-in pump-up circuit
- Vertical output circuit
- Thermal protection circuit built in
- Excellent crossover characteristics
- DC coupling possible

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Pump-up block supply voltage	+B2 max		34	V
Output block supply voltage	+B6 max		70	V
Allowable power dissipation	Pd max	Mounted on an arbitrarily large heat sink.	9	W
Deflection output current	I5 max		-1.4 to +1.4	Ар-о
Thermal resistance	θј-с		3	°C/W
Operating temperature	Topr		-20 to +85	°C
Storage temperature	Tstg		-40 to +150	°C

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LA78040B

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

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	+B2		24	V
Operating supply voltage range	+B2 op		16 to 33	V
Deflection output current	I5p-p		to 1.8	Ар-р

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

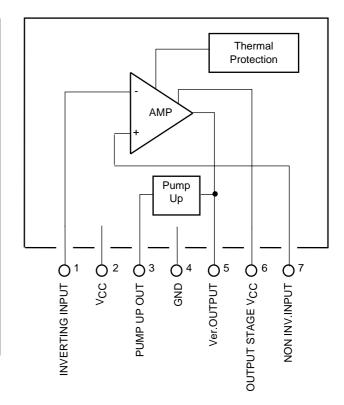
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Deflection output saturation voltage (lower)	Vsat5-4	I5 = 0.9A			1.3	V
Deflection output saturation voltage (upper)	Vsat6-5	I5 = -0.9A			3.2	V
Pump-up charge saturation voltage	Vsat3-4	13 = 20mA			1.8	V
Pump-up discharge saturation voltage	Vsat2-3	I3 = -0.9A			3.0	V
Idling current	ldl		20		50	mA
Midpoint voltage	Vmid		11.0	12.0	13.0	V

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

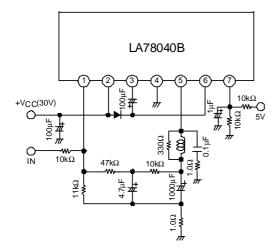
Package Dimensions

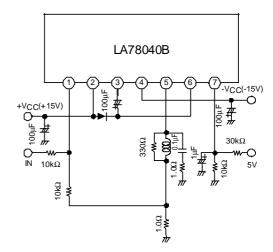
unit : mm (typ) 3286

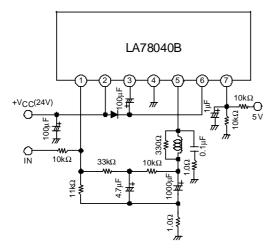
Pin Connections and Functional Block Diagram



Sample Application Circuits







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