Ordering number : ENA0980

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°C

Parameter	Symbol	Conditions	Ratings	Unit
Pump-up block supply voltage	$V_{CC}2$ max		34	V
Output block supply voltage	$V_{CC}6$ 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	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 Condtions at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	$V_{CC}2$ max		24	V
Operating supply voltage range	$V_{CC}2$ op		16 to 33	V
Deflection output current	I5p-p		to 1.8	Ap-p

Operating Characteristics at Ta = 25°C, $V_{CC}2$ = 24V

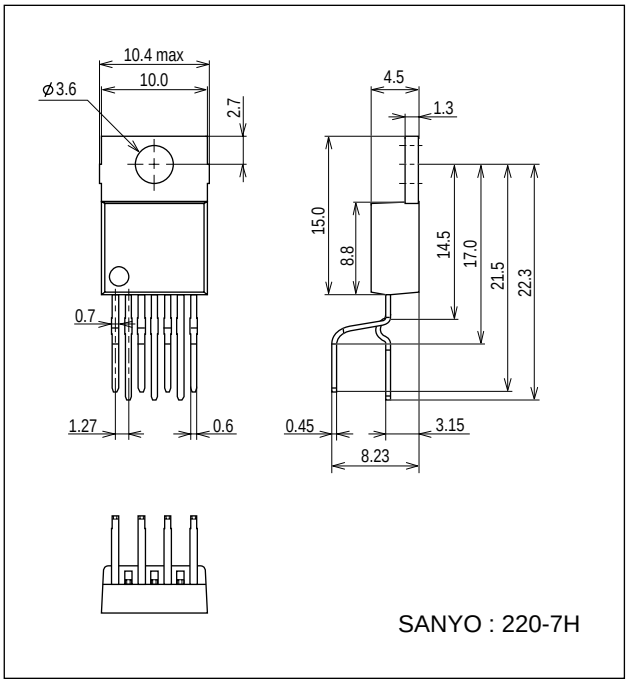
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Deflection output saturation voltage (lower)	Vsat5-4	I5 = 0.9A			1.3	V
Deflection output saturation voltage (upper)	Vsat6-5	I5 = -0.9A			3.2	V
Pump-up charge saturation voltage	Vsat3-4	I3 = 20mA			1.8	V
Pump-up discharge saturation voltage	Vsat2-3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

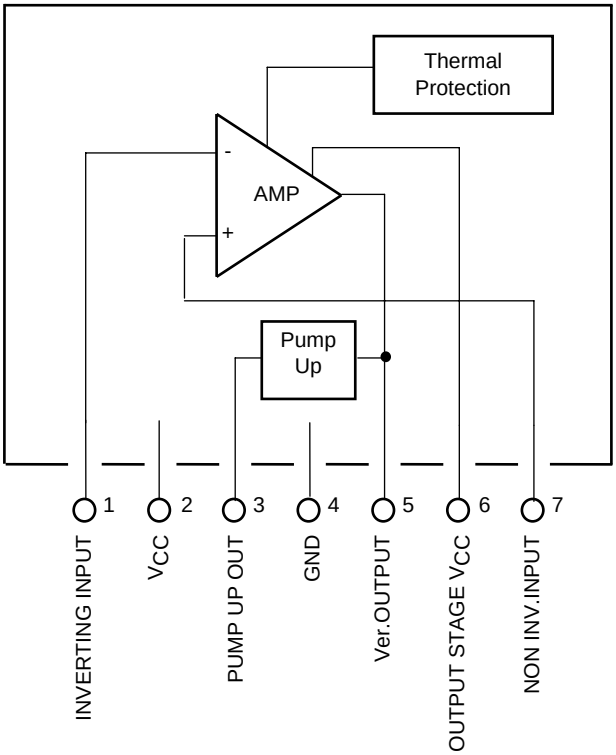
Package Dimensions

unit : mm (typ)

3286



Pin Connections and Functional Block Diagram



Sample Application Circuits