NCH8200HV High Voltage DC Power Supply

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Version 2.0.0

Attention

- Attention : High voltage circuit on the board, do not touch the circuit board and components if it' s working.
- Warning: Overload prohibited (Input voltage/output current out of range).
- Warning: Exposing outdoor prohibited, using in moist or raining place prohibited.
- Warning: Board will generate heat, be sure the board is well heat dissipation.

Features

NCH8200HV high voltage power supply module is miniature step-up DC-DC converter with high efficiency and low heat, operation from 2.5 to 15VDC input with an output of 170v, designed for Nixie tube, Magic eye etc, especially suitable for Lithium battery or USB power supply, pin pitch is suitable for universal board and breadboard.

Technical specifications

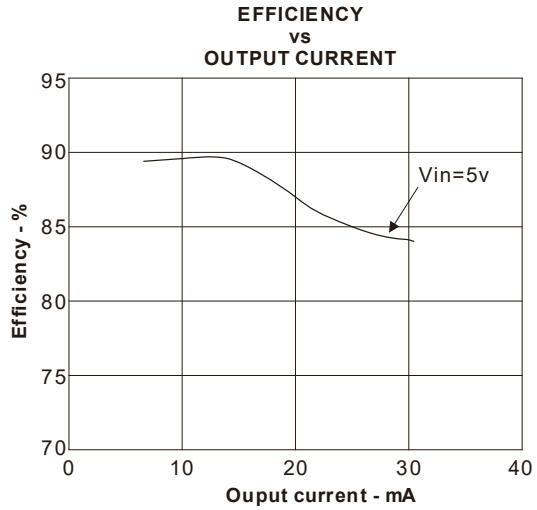
Electronic Specifications

Specification	Symbol	Min	Typ	Max	Units
Input voltage	V_{IN}	2.50	5.00	15.00	Volts
Output voltage (Io = 10mA)	V_{OUT}	---	170	---	Volts
Output current (V_{IN} = 2.7V V_{OUT} = 170V)	I_{OUT}	0	---	10	mAmps
Output current (V_{IN} = 3.0V V_{OUT} = 170V)		0	---	12	mAmps
Output current (V_{IN} = 3.7V V_{OUT} = 170V)		0	---	20	mAmps
Output current (V_{IN} = 5.0V-15V V_{OUT} = 170V)		0	---	30	mAmps
Shutdown current (V_{IN} = 5V V_{OUT} = 170V)	I_{OFF}	---	8	---	mAmps
Operating frequency	F_{sync}	---	100	---	kHz
Efficiency (V_{IN} = 2.5-15VDC, 50%-80% rated load)	Efficiency	---	86	89.65	%

Notes:

1. **No input reverse polarity protection is provided.**

Efficiency curve (VIN = DC 5V)

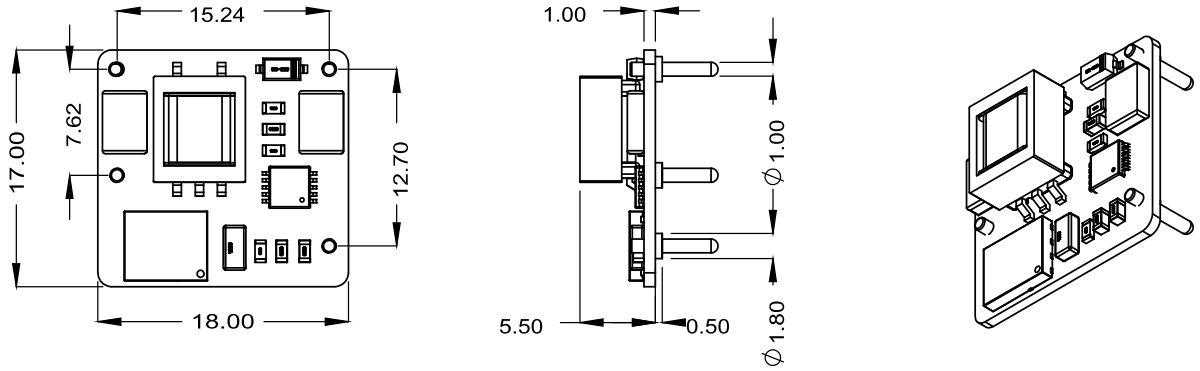


Typical connection

Note:

1. **Recommended input capacitor if the module is located far from the power.**
2. **Module will generate heat, be sure the board is well heat dissipation.**

Module outline



Pin pitch of NCH8200HV is suitable for universal board or breadboard

Unit: mm

NIXIE CLOCK HOME | 辉光钟之家
YanZeyuan's DIY Studio

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