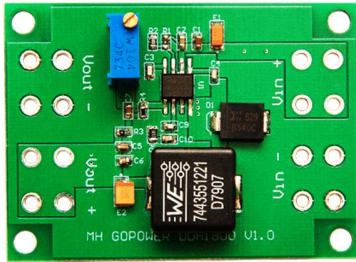


MIH[®] Step-Down DC/DC Converter

DDH1800

Datasheet



Key Features:

- Input Voltage Range: 3.5V to 28V
- Output Voltage Range: 0.8V to 28V
- 5A Output Current
- Efficiency up to 90%

Applications:

- Power over Fiber (PoF)
- Remote Sensors
- Portable Products
- Battery-Operated Devices

Product Description

MH GoPower (“MHGP”) provides high efficiency step-down DC/DC converter modules which are capable of supplying up to 5A of load current. With 3.5V to 28V input operating range, users can set the output voltage from 0.8V to 28V. The DDH1800 also incorporates undervoltage lockout (UVLO) safety feature to disable the converter and maintain a low quiescent current state when the input voltage falls below 3.5V. Although the DDH1800 is designed for use with MHGP’s YCH-H series of Photovoltaic Power Converters (PPCs), it can also be used as a general purpose step-down DC/DC converter.

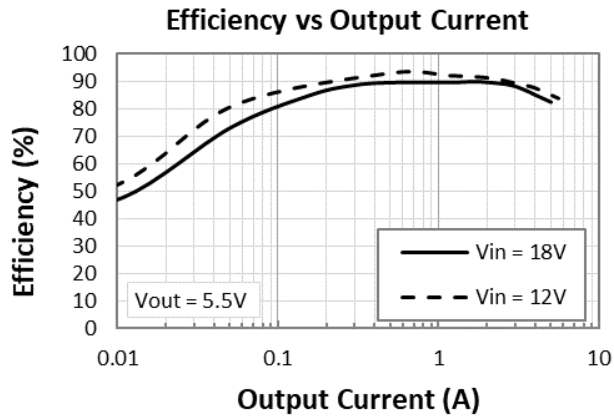
Absolute Maximum Ratings

Parameter	Rating
Input Voltage	-0.3V ~ 30V
Output Current	0 ~ 5A
Operating Temperature	-40°C ~ 85°C
Storage Temperature	-40°C ~ 105°C

Electrical Characteristics *

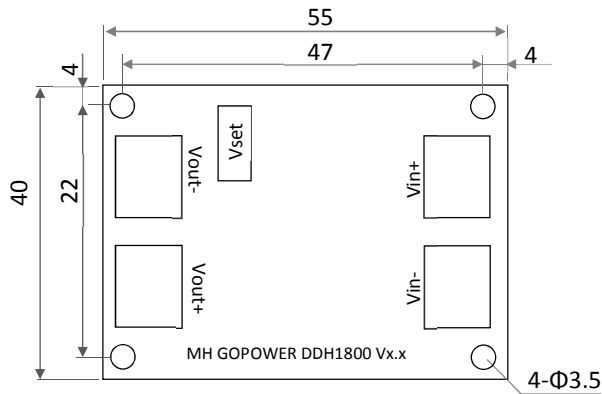
Parameter	Setting	MIN	TYP	MAX
Input Voltage (Vin)	-	3.5V	-	28V
Output Voltage (Vout)	Vin = 12V, Vset = 5.5V	5.46V	5.48V	5.5V
	Vin = 18V, Vset = 5.5V	5.35V	5.49V	5.5V
Vin Undervoltage Lockout Threshold (V _{UVLO})	-	3.5V	-	-
Ripple	Vin = 18V, R _L = 1 Ω	-	-	100mVp-p

* Typical converter performance with ambient temp of ~25°C



Mechanical Dimensions and Pin Configurations

(Unit: mm)



Weight: 15g
Vset: adjusting output voltage