ARD 2

Ardunio Compatibles

Controllers, Shields, Modules & Sensors

ARD2-4079
DC TO DC STEPDOWN BUCK CONVERTER
4.5-28V IN TO 0.8 -20V OUT 3AMP (MP1584)

Description

This DC-DC Step-Down converter (also known as 'Buck' converter) converts a higher voltage to a lower voltage while alos stepping up the available current. It is capable of outputting a voltage in the range of 0.8 to 20V at a continuos current up to 1.5A and short-term current up to 2A. The input voltage must be higher than the output voltage with a typical voltage drop-out of 1.6V. It has over current and thermal liniting features built-in to safely shut the device down if driven too hard.

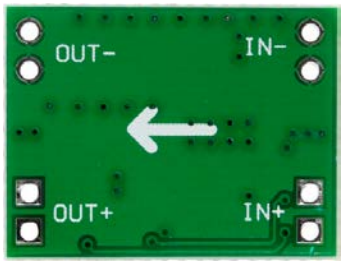
Voltage Adjustment is by a single-turn potentiometer for adjustment of the output voltage.

Because the pot is single-turn, setting an exact voltage is typically not possible, for example when targeting 5V, expect to hit 4.95 - 5.05V.

The lowest output voltage is approximately 0.8V. The upper limit of the adjustment range will depend on the input voltage and is typically about 1.6V less than the input voltage. For instance a 12V input will limit to approximately 10.4V before the module may drop out of regulation.

Front

Back



Specifications

Output Voltage	0.8V ~ 20V (onboard adjustable)
Input Voltage	4.5V ~ 28V
Output Current	2A (Max) 1.5A (continuous)
Conversion Efficiency	92% (maximum)
Switching Frequency	Typically 1MHz
Output Ripple	Less than 30mV
Operating Temperature	-45 C ~ +85 C
Size	22 x 17 x 4mm
Material	Metal
Input Reverse Polarity Protection	None
Colour	Green

Wiltronics Research Pty. Ltd. ABN 26 052 173 154
5 - 7 Ring Road, Alfredton Victoria 3350 | P.O Box 4043, Alfredton, 3350
sales@wiltronics.com.au | Phone: (03) 5334 2513 | Fax: (03) 5334 1845