

# Maker Power™

## **USB Power DC-DC**

#### Features

USB Power Input Rugged USB Mini connector 4 Fixed Voltages Out

- 5.0 VDC
- 3.3 VDC
- 2.5 VDC
- 1.8VDC

Internal Current/Thermal Limit Output Current up to 600mA each<sup>1</sup> Flexible Connection Scheme

#### Applications

Maker applications Circuit Prototyping Power Isolation Field testing Remote Area Power

#### Description

The USB Power DC-DC is a small power module that accepts USB power and provides four voltages. All four of these voltages are fixed and regulated outputs, 5.0VDC, 3.3VDC, 2.5VDC and 1.8VDC. The module provides a small and convenient package that is the same form factor as other **Maker Power<sup>™</sup>** USB power modules. The module provides flexible connections. It will plug into a standard solderless breadboard, IDC 10 pin socket or a standard 10 pin ribbon cable.

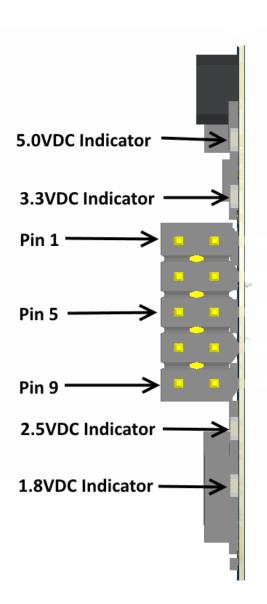
Parameter	Min	Max	Unit	
Input Voltage	4.4	5.2	VDC	
5.0 VDC Output @ 600mA	4.85	5.15	VDC	
3.3 VDC Output @ 600mA	3.15	3.45	VDC	
2.5 VDC Output @ 600mA	2.4	2.6	VDC	
1.8 VDC Output @ 600mA	1.72	1.88	VDC	
Quiescent Current		30	mA	
Line Regulation		50	mV	
Load Regulation		50	mV	
Stability (Temperature/Long term) <sup>2</sup>		0.75	%	

**Electrical Characteristics** 

Note 1. Total current out is dependent on the USB Power supply. Total current out cannot exceed current capability of the USB power supply. Typically the maximum total current is 2.1A. Note 2. Stability only applies to 3.3VDC, 2.5VDC and 1.8VDC outputs.

#### Version 1.02

### PRELIMINARY



Pin	Function
1	5.0VDC
2	5.0VDC
3	3.3VDC
4	3.3VDC
5	GND
6	GND
7	2.5VDC
8	2.5VDC
9	1.8VDC
10	1.8VDC

Note

All specifications listed here were tested under ideal conditions, i.e. short load connections, well behaved circuits, stable USB power inputs, etc. This is **not** a laboratory grade product and is intended as a small and portable power supply for individuals testing and running small portable systems away from conventional power supplies. Your results will vary.