



# Current Sink or Swim

## Specifications

Supply Voltage	5V
Load Current – Max	3A

## Test Results

To test the ability of the unit to maintain the load current over a range of voltages.

Vreg On board regulator output voltage  
VR203 Voltage across the 0.1Ω sense resistor.

### Constant and Initial Parameters

Parameter	Value	Unit
Initial Vbatt	5	V
Initial Iload	100	mA

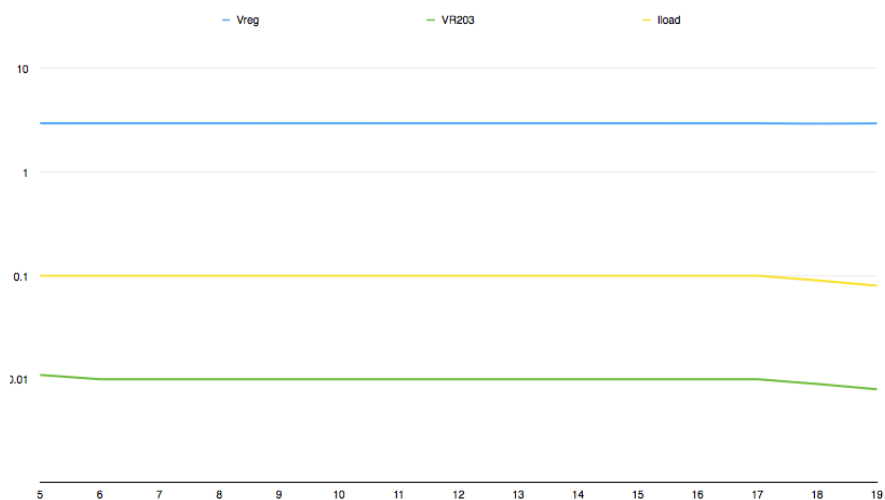
### CSOS Performance Fixed Load

Vbat	Vreg	VR203	Iload
5	2.959	0.011	0.1
6	2.96	0.01	0.1
7	2.962	0.01	0.1
8	2.962	0.01	0.1
9	2.964	0.01	0.1
10	2.964	0.01	0.1
11	2.963	0.01	0.1
12	2.962	0.01	0.1
13	2.962	0.01	0.1
14	2.961	0.01	0.1
15	2.960	0.01	0.1
16	2.958	0.01	0.1
17	2.955	0.01	0.1
18	2.926	0.009	0.09
19	2.948	0.008	0.08

## Constant current – Self powered configuration

### Maximim Load @ 5V

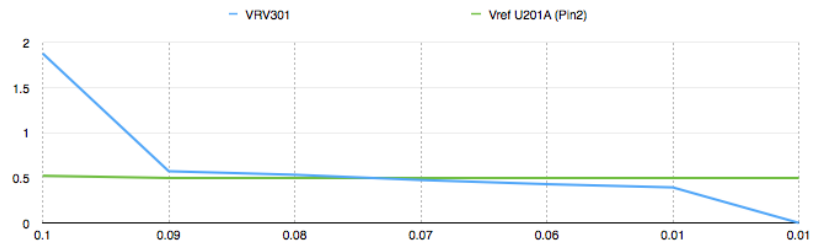
IMax	3.09	A
VR203	0.357	V



## Voltage control cut off – Self powered configuration

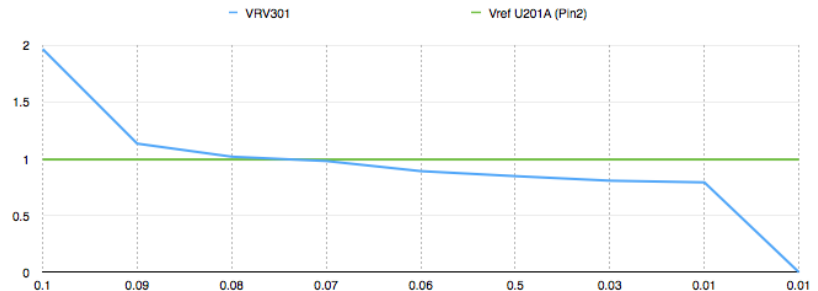
Voltage Control @ 5Vbatt.

load	VRV301	Vref U201A (Pin2)
0.1	1.875	0.522
0.09	0.572	0.497
0.08	0.533	0.497
0.07	0.475	0.497
0.06	0.429	0.497
0.01	0.393	0.497
0.01	0	0.497



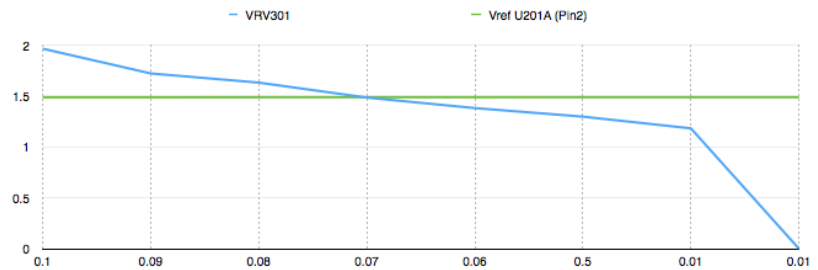
### Voltage Control @ 10Vbatt

load	VRV301	Vref U201A (Pin2)
0.1	1.964	0.992
0.09	1.132	0.992
0.08	1.017	0.992
0.07	0.979	0.992
0.06	0.890	0.992
0.5	0.846	0.992
0.03	0.806	0.992
0.01	0.791	0.992
0.01	0	0.992



### Voltage Control @ 15Vbatt

load	VRV301	Vref U201A (Pin2)
0.1	1.963	1.486
0.09	1.72	1.486
0.08	1.630	1.487
0.07	1.483	1.487
0.06	1.38	1.487
0.5	1.296	1.487
0.01	1.181	1.487
0.01	0	1.487



## Self powered, External Powered configuration

## Jumper Connector P101

1 – 2	External Powered
2 – 3	Self Powered

