



Current Sink or Swim

Specifications

Supply Voltage	5V
Load Current – Max	3A

Test Results

Constant current – Self powered configuration

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.

Maximim Load @ 5V

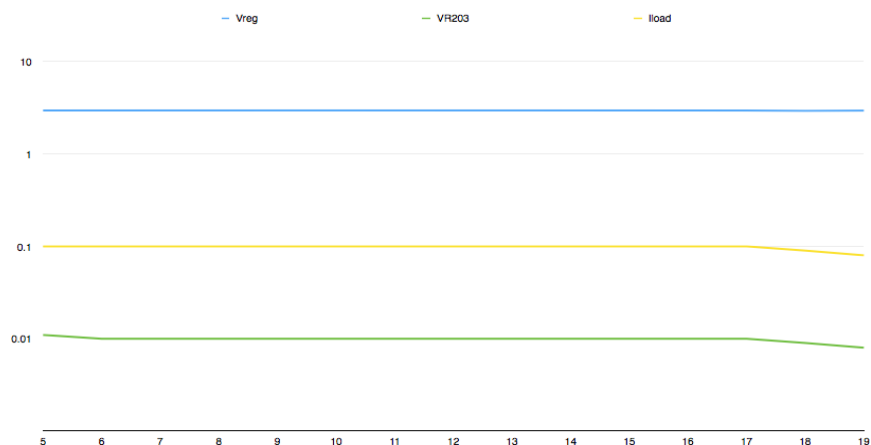
I _{Max}	3.09	A
VR203	0.357	V

Constant and Initial Parameters

Parameter	Value	Unit
Initial V _{batt}	5	V
Initial I _{load}	100	mA

CSOS Performance Fixed Load

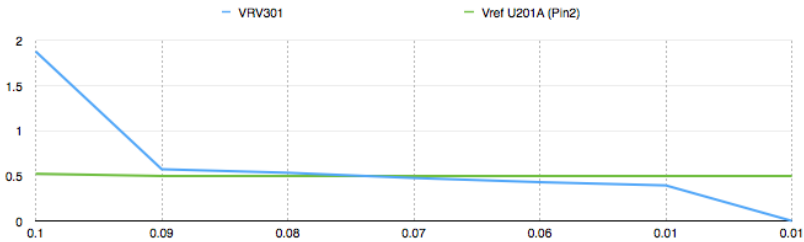
V _{batt}	V _{reg}	VR203	I _{load}
5	2.959	0.011	0.1
6	2.96	0.01	0.1
7	2.962	0.01	0.1
8	2.962	0.01	0.1
9	2.964	0.01	0.1
10	2.964	0.01	0.1
11	2.963	0.01	0.1
12	2.962	0.01	0.1
13	2.962	0.01	0.1
14	2.961	0.01	0.1
15	2.960	0.01	0.1
16	2.958	0.01	0.1
17	2.955	0.01	0.1
18	2.926	0.009	0.09
19	2.948	0.008	0.08



Voltage control cut off – Self powered configuration

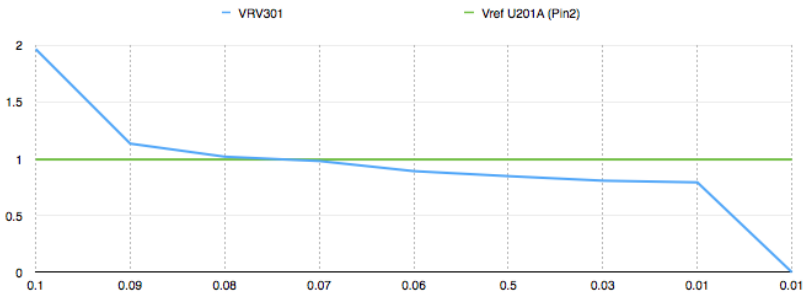
Voltage Control @ 5Vbatt.

Iload	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



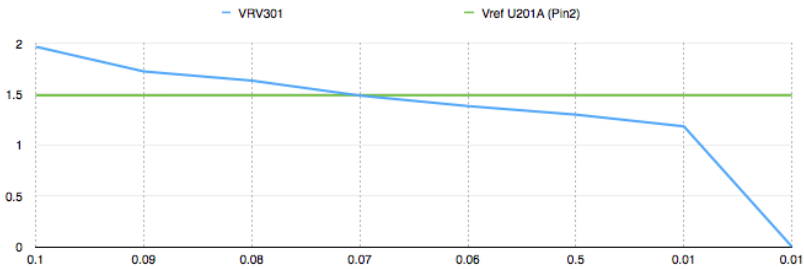
Voltage Control @ 10Vbatt

Iload	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

Iload	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

