Contextual Electronics Current Sink or Swim



Current Sink or Swim

Specifications

Supply Voltage	5V
Load Current – Max	3A

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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

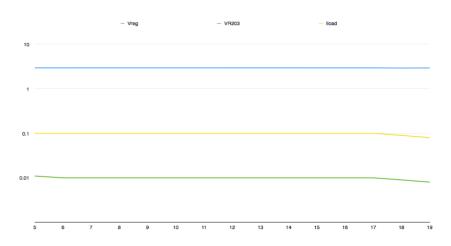
IMax	3.09	Α
VR203	0.357	V

Constant and Initial Parameters

Parameter	Value	Unit
Initial Vbatt	5	ν
Initial Iload	100	mA

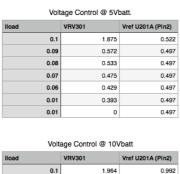
CSOS Performance Fixed Load

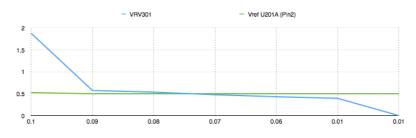
Vbat	Vreg	VR203	lload
5	2.959	0.011	0.1
6	2.96	0.01	0.1
7	2.962	0.01	0.1
8	2.962	0.01	0.1
9	2.964	0.01	0.1
10	2.964	0.01	0.1
11	2.963	0.01	0.1
12	2.962	0.01	0.1
13	2.962	0.01	0.1
14	2.961	0.01	0.1
15	2.960	0.01	0.1
16	2.958	0.01	0.1
17	2.955	0.01	0.1
18	2.926	0.009	0.09
19	2.948	0.008	0.08



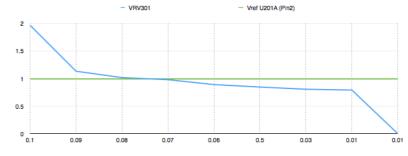
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Voltage control cut off - Self powered configuration

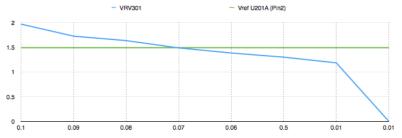




Voltage Control @ 10Vbatt		
lload	VRV301	Vref U201A (Pin2)
0.	1 1.964	0.992
0.0	9 1.132	0.992
0.0	B 1.017	0.992
0.0	7 0.979	0.992
0.0	0.890	0.992
0.	0.846	0.992
0.0	0.806	0.992
0.0	0.791	0.992
0.0	1 0	0.992



Voltage Control @ 15Vbatt		
lload	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



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Self powered, External Powered configuration

Jumper Connector P101

1 - 2	External Powered
2 - 3	Self Powered

