

To opamp (GND)

+12 Vdc @ 200ma  
from bias power supply

+12 Vdc

To opamp  
(VCC)

0.1uf 25V

C2

1uF 15 Vdc

C1

D1

5.1 Vdc Zener

R2

2.0K 1/2W

External Pot

10K 1/4W

R1

Constant  
Current Adjust

Analogue / Bias Return  
GNDANALOG

J1

Scaled input of voltage  
0-100% = 0-5Vdc out

Scaled output of current  
0-100% = 0-4Vdc

Trip Point Adjust

External Pot

10K 1/4W

R3

10.0K 1/2W

R4

U1:1

LM358 OP SMT

1

2

3

10.0M 1/4W

Optional hysteresis resistor

Current Monitor  
Output 0-4Vdc

U1:2

LM358 OP SMT

5

6

7

Optional  
gain of 10 op amp.

20K 1/4W

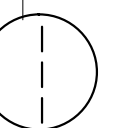
R6

2.0K 1/4W

R5

Battery

Power Test  
Terminals



Viewed from top of load

20

19

10K

50K

J1

1

2

+

Source

Under Test

-

[Http://www.EXEC-ENG.com](http://www.EXEC-ENG.com)

Executive Engineering

Title Battery Tester for EE301xx & EE151xx

Size Number 301/151 Battery Tester

Date Sun Sep 19, 2004

Filename battery-tester-ee301xx.SCH Sheet 1 of 1

Connector shown from  
top view.  
Pins shown as seen  
on electronic load.

Note J1 - Pin 2 and the (-) source under test  
are connected, never have current flowing  
through this path. All control signals should  
be connected to J1-pin 2.  
Only the source under test should be connected  
to the power test terminal (+) and (-).

A

B

C

D

4

3

2

1