

# Application Note

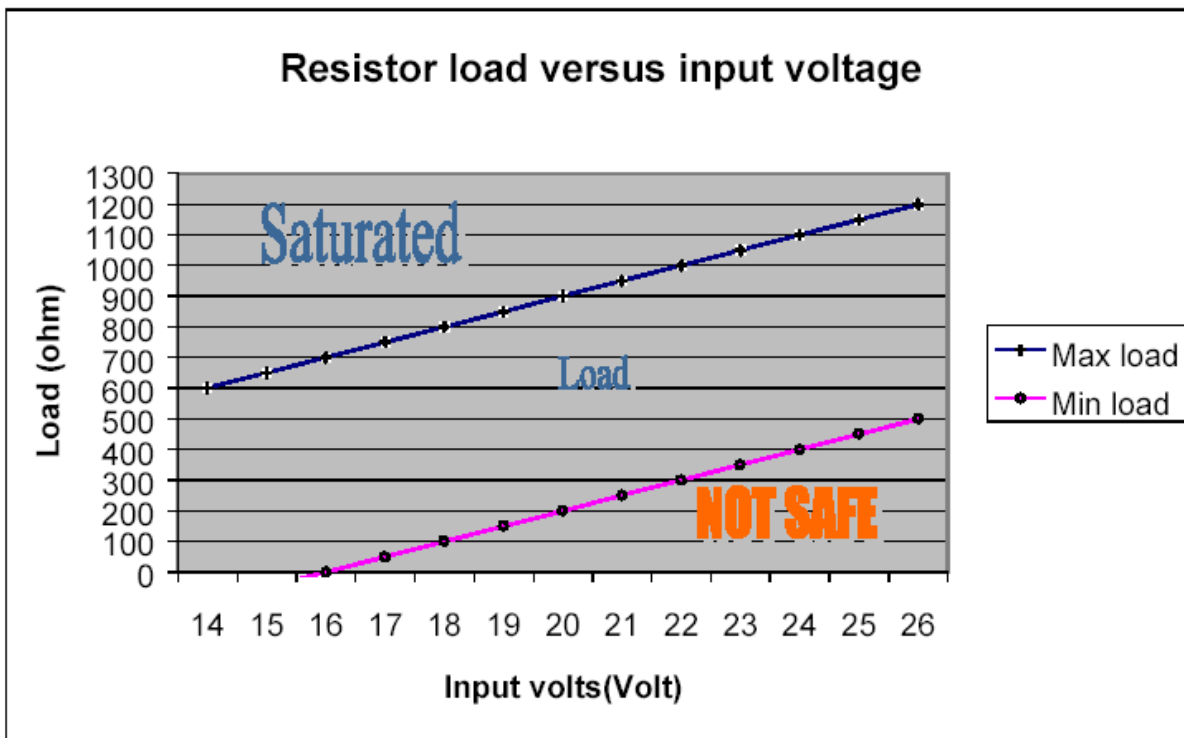
## SA40072 ñ 4 to 20Ma Signal Conditioner Technical Information

### Specifications/Electrical

Output: 4-20mA

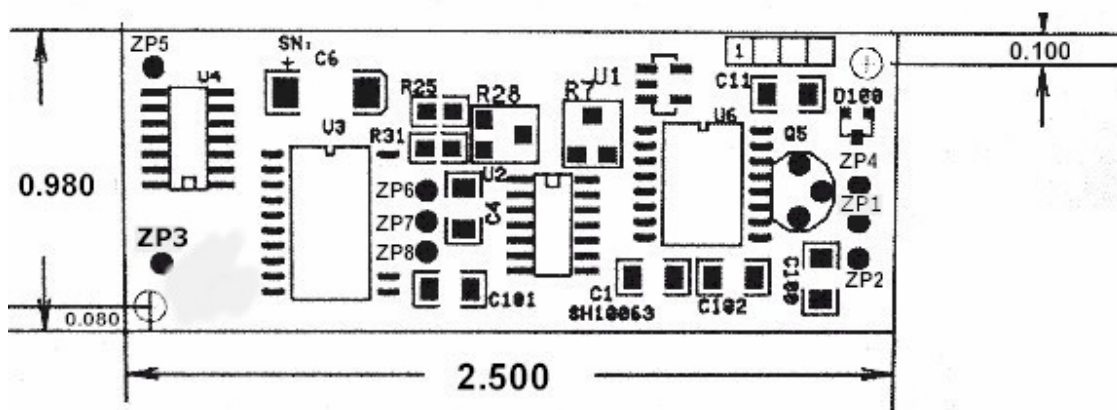
Input Voltage: 14VDC to 26VDC

Load: See graph below



### Dimensions and Connection/Adjustment Locations

(inches)



\*Mounting Holes - M2.5 (2 places)

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#### **Adjustments**

ï Zero (null) offset = R28

ï Gain = R7

#### **Electrical Connections**

ï ZP1, ZP3 = +14VDC to +24VDC

ï ZP2, ZP5 = Ground

ï ZP4 = 4-20mA output

#### **Sensor Connections** (center of the board)

· ZP6 = Electrode A

· ZP7 = Electrode B

· ZP8 = Neutral (center electrode)

#### **Typical Current Consumption**

V supply (VDC)	OUT (mA)	ZP1, ZP3 (mA)
24	-12	+18.7
14	-12	+18.7
14	-19	+26.7
24	-19	+26.7
24	0	+6.4

**Note: Negative current out of circuit, positive current into circuit.**

#### **Noise (ripple)**

Output (mA)	Load (Ohms)	Ripple At 600Hz (uA)
-19	475	38
-12	475	2
-5	475	38

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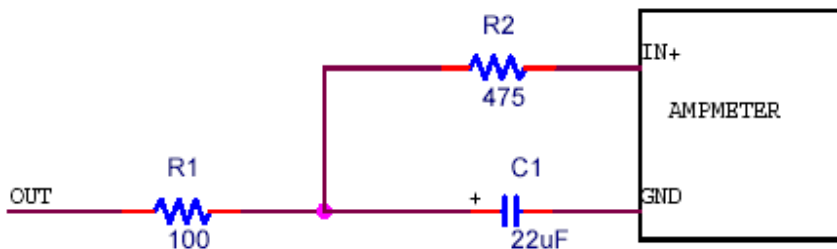
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#### Recommended circuit to reduce noise



#### Output versus supply

- Supply in: (ZP1,ZP3) +14VDC to +24VDC
- Supply out: (ZP4) +/-2uA

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