

# Application Note

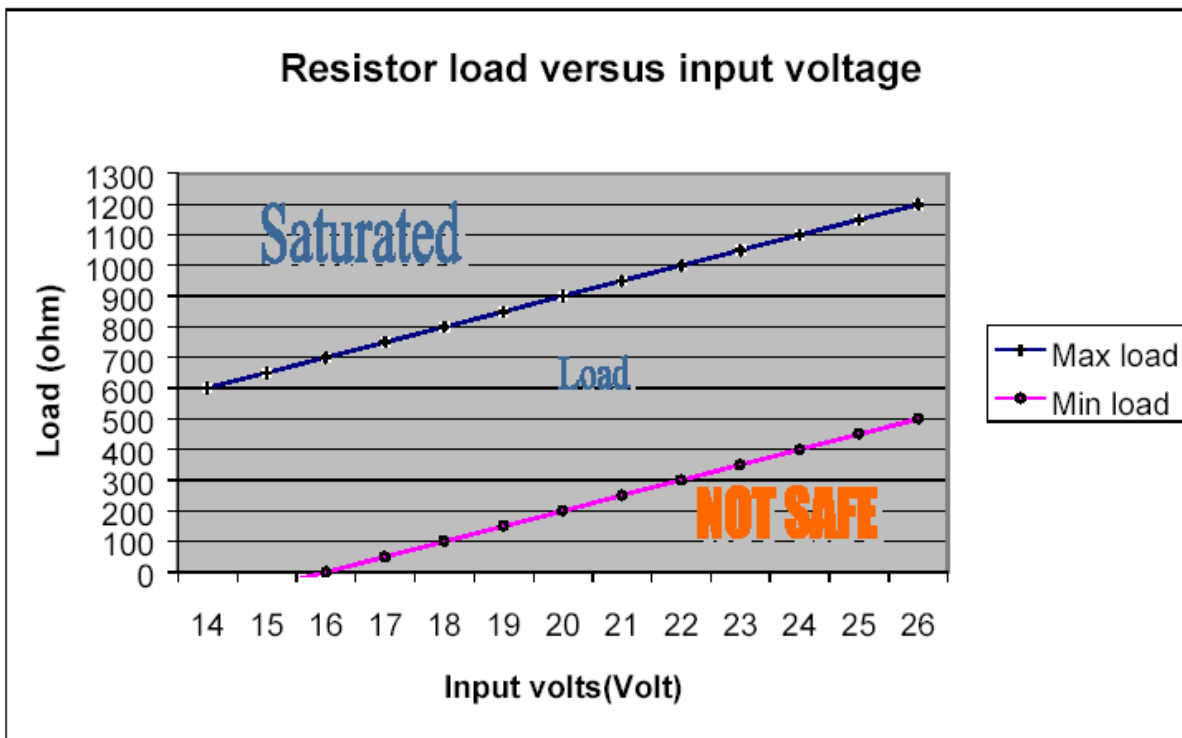
## SA40072 ñ 4 to 20Ma Signal Conditioner Technical Information

### Specifications/Electrical

Output: 4-20mA

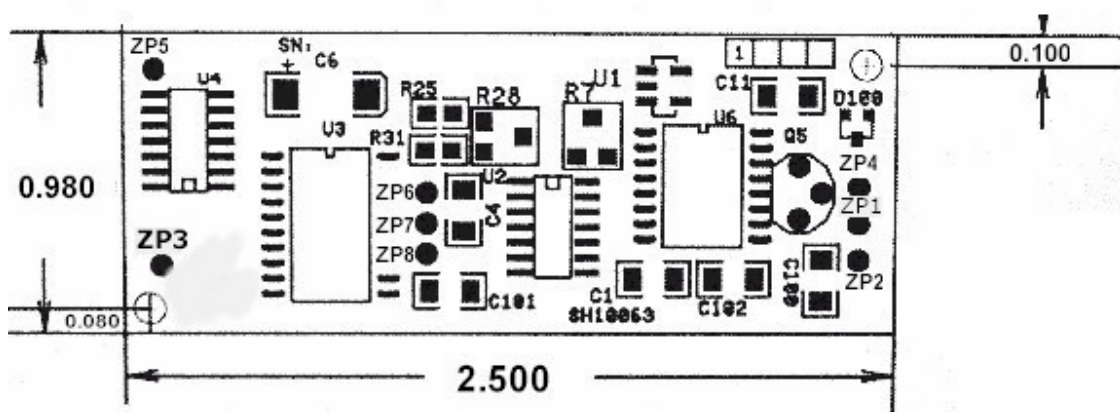
Input Voltage: 14VDC to 26VDC

Load: See graph below



### Dimensions and Connection/Adjustment Locations

(inches)



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

駿融企業有限公司 JIN ZON ENTERPRISE CO., LTD.  
104 台北市長安東路二段 171 號 4 樓之 3  
4F-3, No. 171, Sec. 2, Chang An E. Rd., Taipei, Taiwan, R. O. C.  
TEL: 886-2-27111093~5 FAX: 886-2-27310902  
E-mail: [jinzon@ms2.hinet.net](mailto:jinzon@ms2.hinet.net) Http:// [www.jinzon.com.tw/](http://www.jinzon.com.tw/)

# Application Note

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

### 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

駿融企業有限公司 JIN ZON ENTERPRISE CO., LTD.

104 台北市長安東路二段 171 號 4 樓之 3

4F-3, No. 171, Sec. 2, Chang An E. Rd., Taipei, Taiwan, R. O. C.

TEL: 886-2-27111093~5

FAX: 886-2-27310902

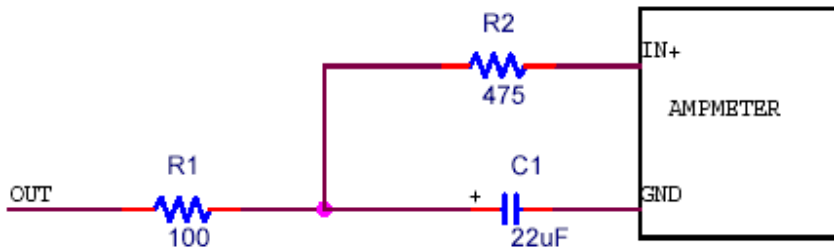
E-mail: [jinzon@ms2.hinet.net](mailto:jinzon@ms2.hinet.net)

Http:// [www.jinzon.com.tw/](http://www.jinzon.com.tw/)

# Application Note

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

### Recommended circuit to reduce noise



### Output versus supply

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

駿融企業有限公司 JIN ZON ENTERPRISE CO., LTD.  
104 台北市長安東路二段 171 號 4 樓之 3  
4F-3, No. 171, Sec. 2, Chang An E. Rd., Taipei, Taiwan, R. O. C.  
TEL: 886-2-27111093~5 FAX: 886-2-27310902  
E-mail: [jinzon@ms2.hinet.net](mailto:jinzon@ms2.hinet.net) Http:// [www.jinzon.com.tw/](http://www.jinzon.com.tw/)