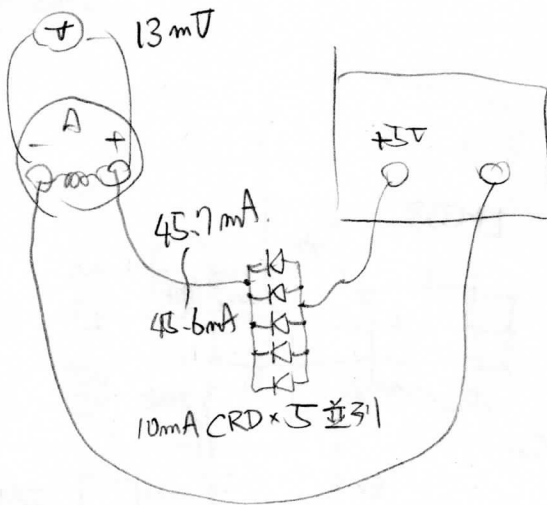
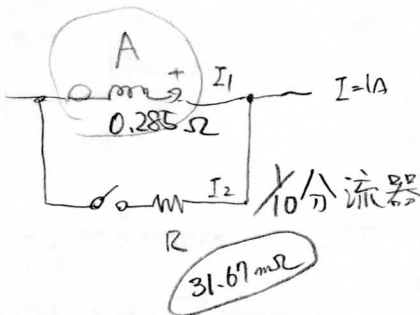


分流器



電流計のフルスケール測定
4端子方

$$\frac{13\text{mV}}{45.6\text{mA}} = 0.285\Omega$$



$$I_1 = \frac{31.67\text{m}\Omega}{0.285 + 31.67\text{m}\Omega} = 100\text{mA}$$

$$0.285 \cdot I_1 = R \cdot I_2$$

$$I_1 + I_2 = I$$

$$I_1 = \frac{R}{0.285} \cdot I_2$$

$$I_2 = I - I_1$$

$$= \frac{R}{0.285} (I - I_1)$$

$$I_1 = \frac{R}{0.285} - \frac{R}{0.285} I_1$$

$$I_1 \left(1 + \frac{R}{0.285}\right) = \frac{R}{0.285}$$

$$I_1 = \frac{R}{0.285} \cdot \frac{0.285}{0.285 + R} = \frac{R}{0.285 + R} = 0.1 \times 0.3$$

$$R = 0.1 (0.285 + R) = 0.0285 + 0.1R$$

$$0.9R = 0.0285$$

$$R = \frac{0.285}{9} = 31.67\text{m}\Omega$$

2023.3.24

配線, SW接触抵抗があること

10 mΩ x 2

でほぼ 1/10 になった