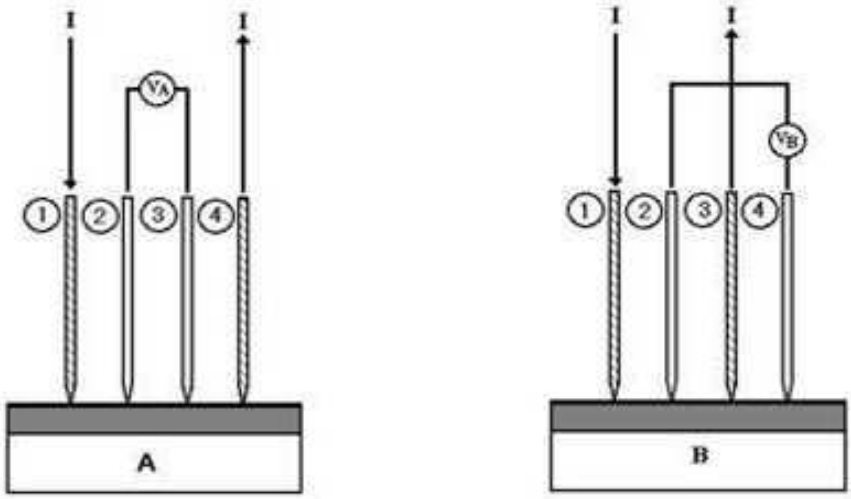
上海瞬渺光电
Rayscience

Dual Configuration

The Dual Configuration method measures current in both + and – polarity and in two different pin configurations as follows:

（1）Configuration A

Measure the Voltage Va23 and the Current Ia14 in the Traditional configuration as noted in figure a. Repeat the measurement in the reverse direction. Va32 and Ia41.



（2）Configuration B

Measure the Voltage Vb24 and the Current Ib13 in the traditional configuration as noted in figure b. Repeat the measurement in the reverse direction. Vb42 and Ib31.

Then

Ra = (Va23/Ia14 + Va32/Ia41)/2

Rb = (Vb24/Ib13 + Vb42/Ib31)/2

The Dual Configuration correction constant, Ka is:

Ka = -14.696 + 25.173(Ra/Rb) –7.872(Ra/Rb)2

The average resistance of the film or Rs (ohms) is :

Rs = Ra x Ka = {-14.696 + 25.173(Ra/Rb) –7.872(Ra/Rb)2} x Ra