



模块 6

活动：通用输入输出



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问题 1

如果 $1\text{k}\Omega$ 电阻与 $2\text{k}\Omega$ 电阻并联，那么两者的等效电阻是多少？

问题 2

如果 $1\text{k}\Omega$ 电阻与 $2\text{k}\Omega$ 电阻串联，那么两者的等效电阻是多少？

问题 3

在 $1\text{k}\Omega$ 电阻两端加 5V 的电压，那么流过的电流值为多大？

问题 4

$1\mu\text{F}$ 电容在 1kHz 时有什么电抗？

问题 5

频率为 1MHz 的 1V 交流信号加在 1nF 电容上，那么电流是多少？

问题 6

1V 直流信号加在 1nF 电容上，电流是多少？

问题 7

一个 $10\text{k}\Omega$ 电阻与一个 $0.1\mu\text{F}$ 电容串联。这种组合的截止频率是多少？在这个频率下电容器的电抗是多少？

问题 8

电阻器与 $0.22\mu\text{F}$ 电容器串联放置。如果您希望将截止频率设置为 1kHz ，那么您应该选择多大的电阻值？

问题 9

HLMP-4700 红色 LED 的工作电压为 1.7V 和 2mA 。发光效率为 150 流明/瓦，那么流明的亮度是多少？

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