

$$V = A \cdot \Omega = mA \cdot K\Omega = \mu A \cdot M\Omega$$

$$mV = mA \cdot \Omega = \mu A \cdot K\Omega$$

$$\mu V = \mu A \cdot \Omega$$

$$V = \frac{W}{A} = \frac{mW}{mA} = \frac{\mu W}{\mu A}$$

$$mV = \frac{\mu W}{mA}$$

$$\mu V = \frac{\mu W}{A}$$

$$V = \sqrt{W \cdot \Omega}$$

$$mV = \sqrt{\mu W \cdot \Omega}$$

$$\mu V = 1000 \sqrt{\mu W \cdot \Omega} \quad U = \sqrt{P \cdot R}$$

$$U = \frac{P}{I}$$

V = Volt

**U**

Spannung

$$A = \frac{V}{\Omega}$$

$$mA = \frac{V}{K\Omega} = \frac{mV}{\Omega}$$

$$\mu A = \frac{V}{M\Omega}$$

$$A = \frac{W}{V} = \frac{mW}{mV} = \frac{\mu W}{\mu V}$$

$$mA = \frac{mW}{V} = \frac{\mu W}{mV}$$

$$\mu A = \frac{\mu W}{V}$$

$$A = \sqrt{\frac{W}{\Omega}}$$

$$mA = \sqrt{\frac{mW}{K\Omega}}$$

$$\mu A = \sqrt{\frac{\mu W}{M\Omega}}$$

$$I = \frac{U}{R}$$

$$I = \frac{P}{U}$$

$$I = \sqrt{\frac{P}{R}}$$

A = Ampere

**I**

Strom

$$\Omega = \frac{V}{A} = \frac{mV}{mA}$$

$$K\Omega = \frac{V}{mA} = \frac{mV}{\mu A}$$

$$M\Omega = \frac{V}{\mu A}$$

$$R = \frac{U}{I}$$

Widerstand

**R**

$\Omega = \text{Ohm}$

$$R = \frac{U^2}{P}$$

$$\Omega = \frac{V^2}{W} = \frac{mV^2}{\mu W}$$

$$\Omega = \frac{V^2}{mW}$$

$$\Omega = \frac{V^2}{\mu W}$$

$$\Omega = \frac{W}{A^2}$$

$$K\Omega = \frac{mW}{mA^2}$$

$$M\Omega = \frac{W}{mA^2} = \frac{\mu W}{\mu A^2}$$

$$R = \frac{P}{I^2}$$

Leistung

**P**

W = Watt

$$P = U \cdot I$$

$$P = \frac{U^2}{R}$$

$$P = I^2 \cdot R$$

$$mW = mA^2 \cdot k\Omega$$

$$\mu W = mA^2 \cdot M\Omega$$

$$W = A^2 \cdot \Omega = mA^2 \cdot M\Omega$$

$$W = V \cdot A$$

$$mW = V \cdot mA$$

$$mW = mV \cdot A$$

$$\mu W = mV \cdot mA$$

$$W = \frac{V^2}{\Omega}$$

$$mW = \frac{V^2}{K\Omega}$$

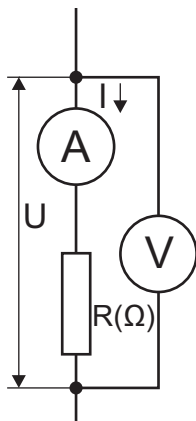
$$\mu W = \frac{mV^2}{\Omega} = \frac{V^2}{M\Omega}$$

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### Ohmsches Dreieck



$$U = \frac{U}{I \cdot R}$$



$$R = \frac{U}{I \cdot R}$$

U	V	mV	$\mu V$	I	A	mA	$\mu A$
1V=	1	1000	$10^6$	1A=	1	1000	$10^6$
1mV=	0,001	1	1000	1mA=	0,001	1	1000
1 $\mu V$ =	$10^{-6}$	0,001	1	1 $\mu A$ =	$10^{-6}$	0,001	1
R	$\Omega$	K $\Omega$	M $\Omega$	P	W	mW	$\mu W$
1 $\Omega$ =	1	0,001	$10^{-6}$	1W=	1	1000	$10^6$
1K $\Omega$ =	1000	1	0,001	1mW=	0,001	1	1000
1M $\Omega$ =	$10^6$	1000	1	1 $\mu W$ =	$10^{-6}$	0,001	1