



$V = A * \Omega = mA * K\Omega = \mu A * M\Omega$
 $mV = mA * \Omega = \mu A * K\Omega$
 $\mu V = \mu A * \Omega$

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

$V = \sqrt{W * \Omega}$
 $mV = \sqrt{\mu W * \Omega}$
 $\mu V = 1000 \sqrt{\mu W * \Omega}$

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

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

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

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

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

U
 Spannung

I
 Strom

Widerstand
R
 $\Omega = \text{Ohm}$

Leistung
P
 W = Watt

$W = V * A$
 $mW = V * mA$
 $mW = mV * A$
 $\mu W = mV * mA$

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

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

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

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

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

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

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

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Ohmsches Dreieck

$U = I * R$

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

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

U	V	mV	μV	I	A	mA	μA
1V=	1	1000	10 ⁶	1A=	1	1000	10 ⁶
1mV=	0,001	1	1000	1mA=	0,001	1	1000
1μV=	10 ⁻⁶	0,001	1	1μA=	10 ⁻⁶	0,001	1
R	Ω	KΩ	MΩ	P	W	mW	μW
1Ω=	1	0,001	10 ⁻⁶	1W=	1	1000	10 ⁶
1KΩ=	1000	1	0,001	1mW=	0,001	1	1000
1MΩ=	10 ⁶	1000	1	1μW=	10 ⁻⁶	0,001	1