

Application of Ohm's law to numbers

~AC and DC numbers and impedance numbers~

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Abstract

Each number has its own meaning. In this chapter, I was able to make explicit the relationship between the meaning of numbers and Ohm's law.

General comments

In physics, it is known that capacitors easily pass AC and coils easily pass DC.

+	0	1	2	3	4
0	0	1	2	3	4
1	1	2	3	4	0
2	2	3	4	0	1
3	3	4	0	1	2
4	4	0	1	2	3

×	0	1	2	3	4
0	0	0	0	0	0
1	0	1	2	3	4
2	0	2	4	1	3
3	0	3	1	4	2
4	0	4	3	2	1

From the table above, from my definition series, assuming that AC has positive and negative elements in terms of numbers,

	2(=0)	resistance
0+0=0*0	0	resistance
1+2=-(1*2)	3	capacitor
2+2=2*2	4	coil
3+3=-(3*3)	1	capacitor
4+3=4*3	2	coil

The AC and DC numbers are specifically defined here,

$$AC: 4^x (\because 4^1 = 4 = -1, 4^2 = 16 = 1, 4^3 = 64 = -1, 4^4 = 256 = 1, \dots) \Rightarrow -1$$

$$DC: 1^x (\because 1^1 = 1, 1^2 = 1, 1^3 = 1, 1^4 = 1, \dots) \Rightarrow +1$$

And more from my back number 97, from the physics unit formula,

In particular, the unit of charge, the coulomb, is defined as 3.

1	→	[rad]	$F = \frac{1}{4\pi\epsilon_0} \cdot \frac{q_1 \cdot q_2}{r^2} = F = 3$	$\frac{1}{4\pi \left(\frac{1}{\mu_0}\right) \left(\frac{1}{C^2}\right)} \cdot \frac{q_1 \cdot q_2}{r^2} = \frac{1}{4 \times 4 \times \left(\frac{3^2}{3 \times 2^2}\right) \times \left(\frac{2}{3}\right)^2} \cdot \frac{3 \times 3}{3 \times 3}$ $= \frac{1}{16 \times \frac{3}{4} \times \frac{4}{9}} = \frac{3}{16} = \frac{3}{1} = 3 = F$
2	→	[s]		
3	→	e(=±∞) [m]		
4	→	π [kg]		

$$\therefore [A] = \frac{[C]}{[s]} = \frac{3}{2} = \frac{8}{2} = 4, [B] = \frac{[A]}{[m]} = \frac{4}{3} = \frac{9}{3} = 3$$

F	L ⁻² T ⁴ M ⁻¹ I ²	C/V = kg ⁻¹ ·m ⁻² ·A ² ·s ⁴
H	L ² T ⁻² M I ⁻²	Wb/A = V·s/A = kg·m ² ·s ⁻² ·A ⁻²

Thus, in summary

C[F]	=	(4 ⁻¹)*(3 ⁻²)*(4 ²)*(2 ⁴)	=	4*4*1*1	16=1	⇒	1/(2π fC)	1/(2*4*1/2*1)	XC	4
L[H]	=	4*(3 ²)*(2 ⁻²)*(4 ⁻²)	=	4*4*4*1	64=4	⇒	2π fL	2*4*1/2*4	XL	1
									X=XL-XC	-3 = 2
DC (I=1)	V=IR	R=V/I	⇒	R=3	because I=1, V=J/C=3					
AC (I=-1)	V=IZ	Z=V/I	⇒	Z=2?	because I=-1=4, V=3					
				Z=R+Xj(=i)						
				Z=R+Xi	3+2*2	7 =			Z=2	POOF END