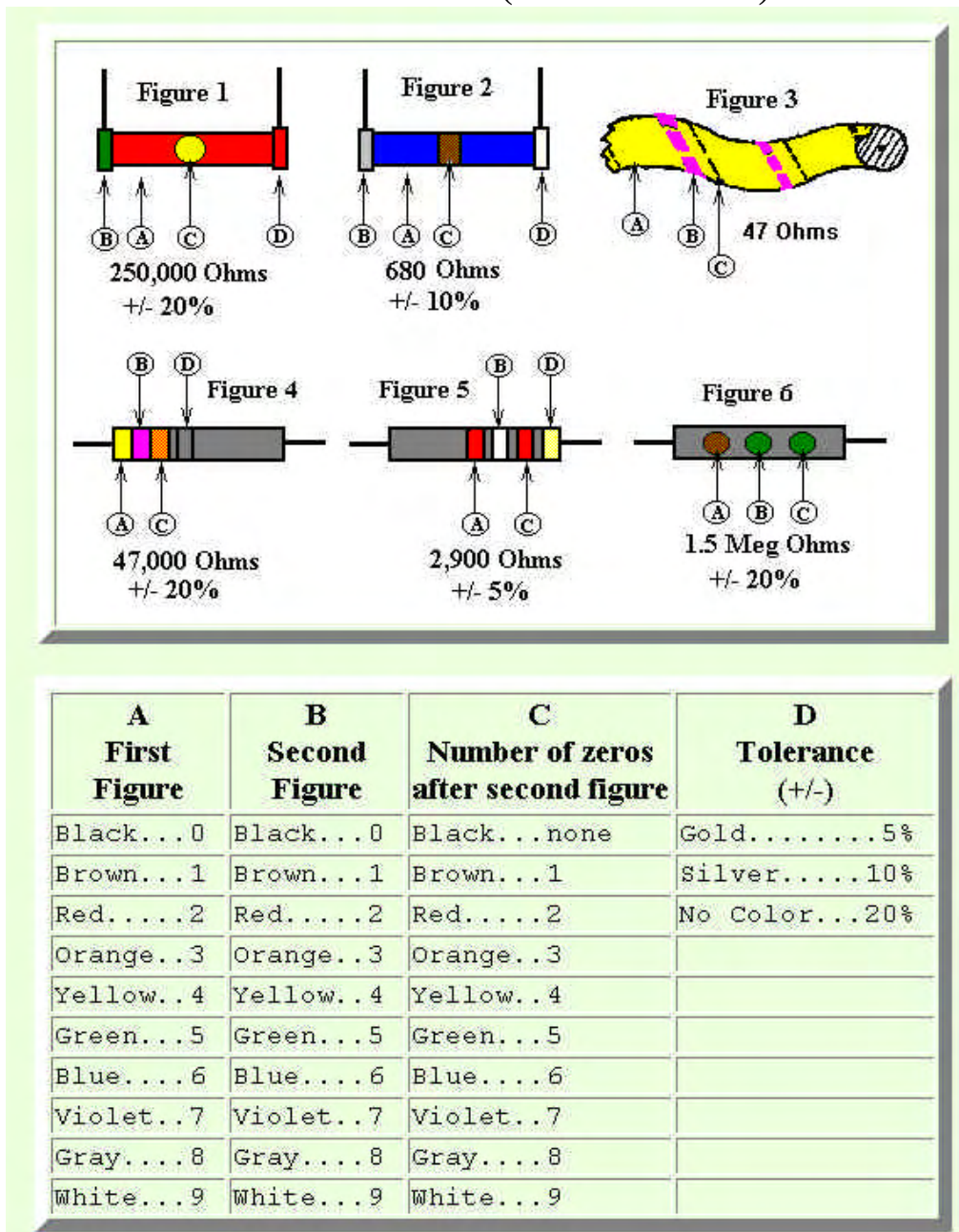
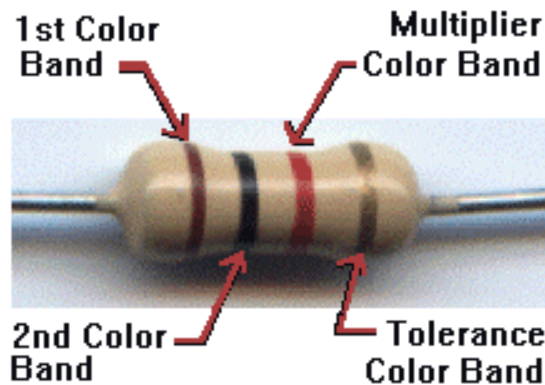


SOCIÉTÉ QUÉBÉCOISE DES COLLECTIONNEURS DE RADIOS ANCIENS
RESISTANCES (CODE RMA)



**22K Ohms
 (22000)
 5%**

RESISTANCES MODERNES



BLACK		0
BROWN		1
RED		2
ORANGE		3
YELLOW		4
GREEN		5
BLUE		6
VIOLET		7
GRAY		8
WHITE		9

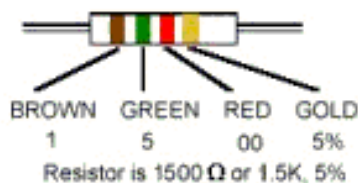
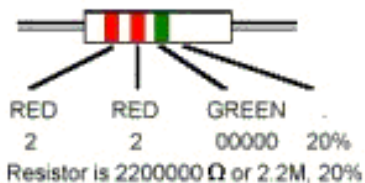
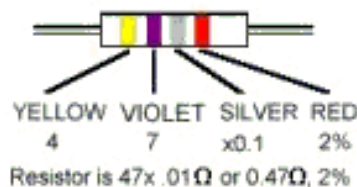
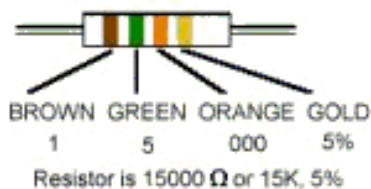


What they mean:

- Band one - 1st figure of value
- Band two - 2nd figure of value
- Band three - number of zeros/multiplier
- Band four - Tolerance ($\pm\%$) See below

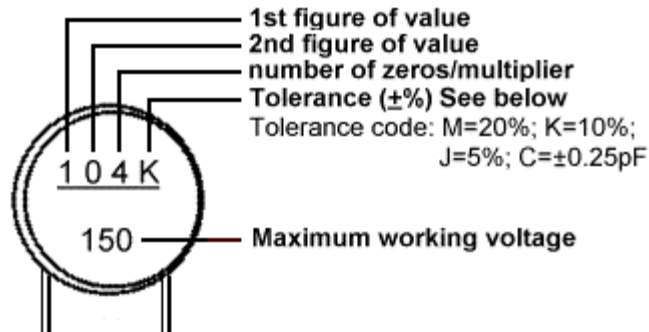
Tolerance band colors: Red 2%; Gold 5%; Silver 10%; No band 20%

Note: how the bands are closer to one end of the resistor than the other.



CONDENSATEURS CÉRAMIQUE ET MOULÉS (CODE IEC)

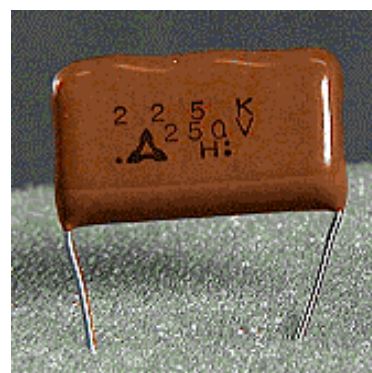
LA VALEUR EST CODÉE EN PICO FARAD (pF) OU BIEN INDIQUÉE DIRECTEMENT POUR LES PETITES VALEURS (<100pF). LA TENSION MAXIMALE EST INDIQUÉE EN CLAIR.



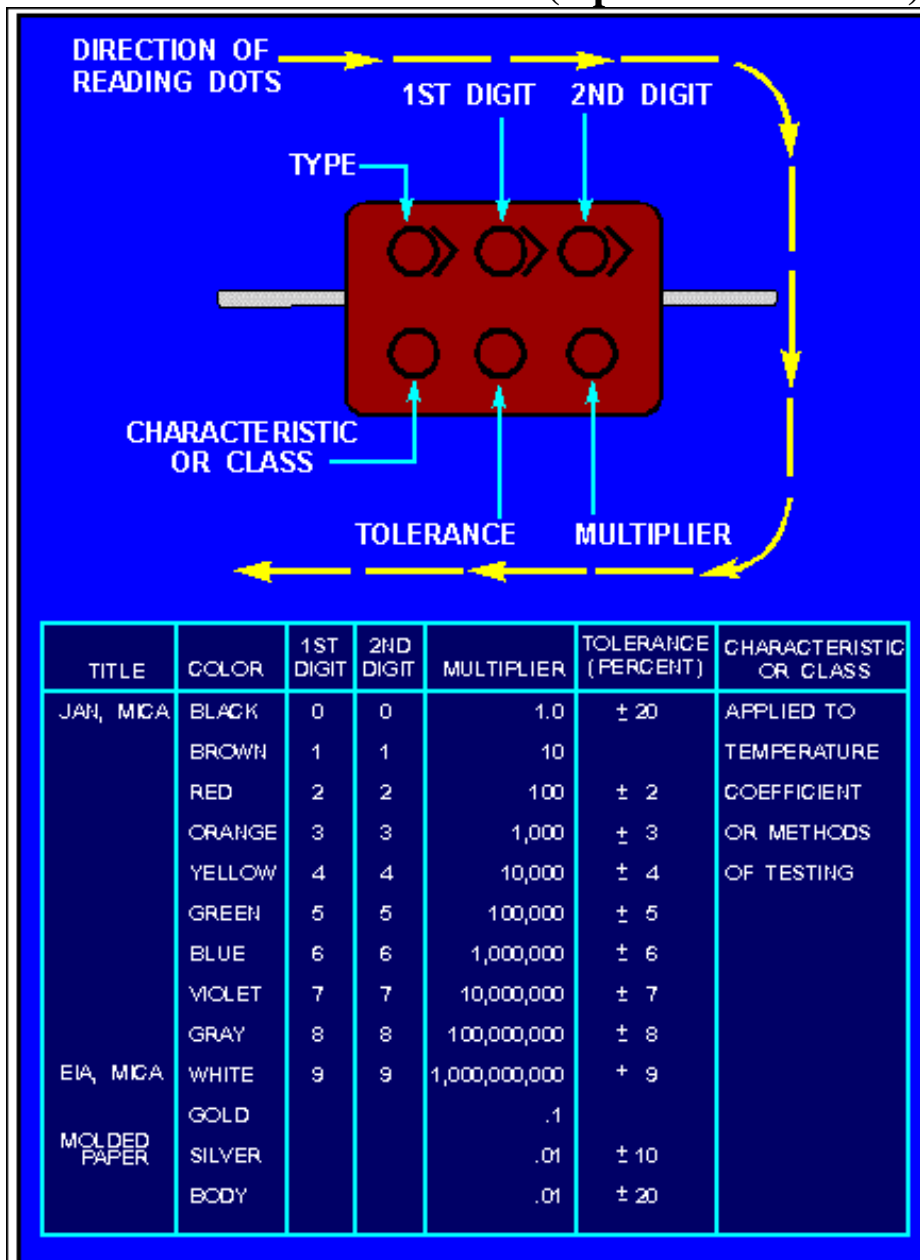
EX : 104K 150
100000pF, ±10%

CODE / Marking	uF microfarads	nF nanofarads	pF picofarads
1R0	0.000001	0.001	1
100	0.00001	0.01	10
101	0.0001	0.1	100
102	0.001	1	1,000
103	0.01	10	10,000
104	0.1	100	100,000
105	1	1,000	1,000,000
106	10	10,000	10,000,000
107	100	100000	100,000,000

Tolerance Table	
C	+/- 0.25pF
D	+/- 0.5pF
F	1%
G	2%
J	5%
K	10%
M	20%
Z	+80 -20%

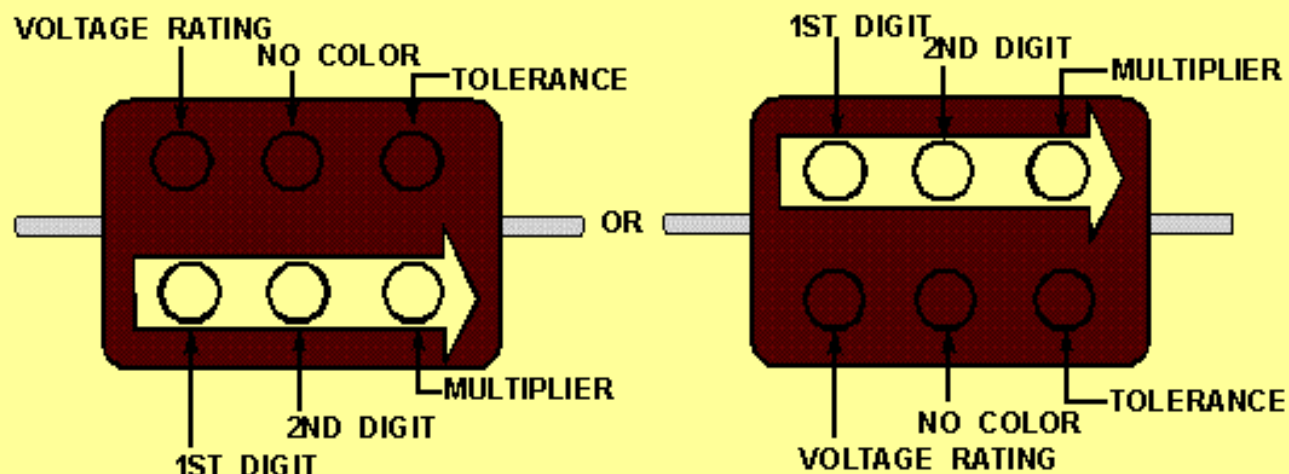
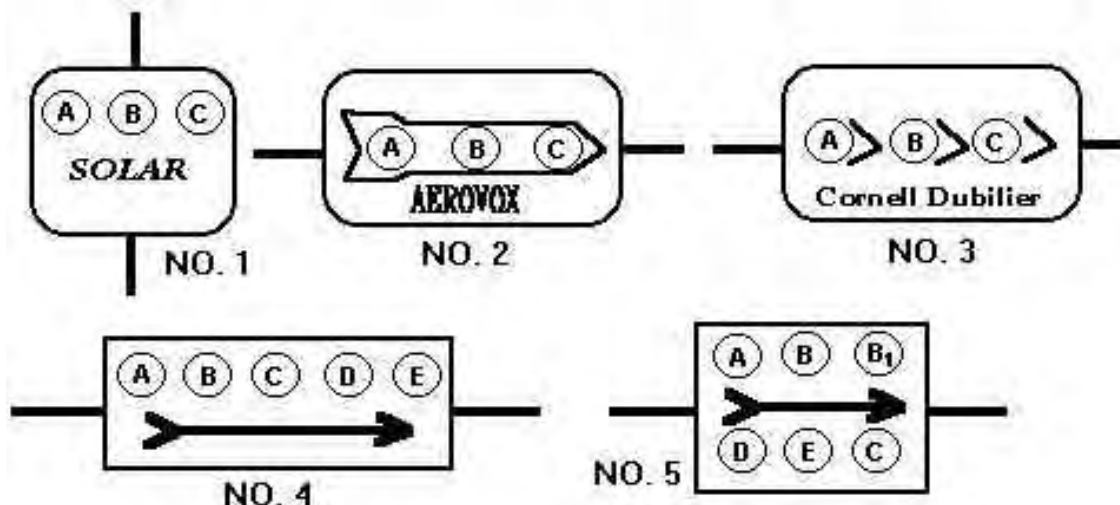


SOCIÉTÉ QUÉBÉCOISE DES COLLECTIONNEURS DE RADIOS ANCIENS
CONDENSATEURS MICA (6 points de couleur)



NOIR BRUN NOIR ROUGE ARGENT
MICA 1 0 00 ±10% => **1000pF, ±10%**

SOCIÉTÉ QUÉBÉCOISE DES COLLECTIONNEURS DE RADIOS ANCIENS
CONDENSATEURS MICA (3 points de couleur)

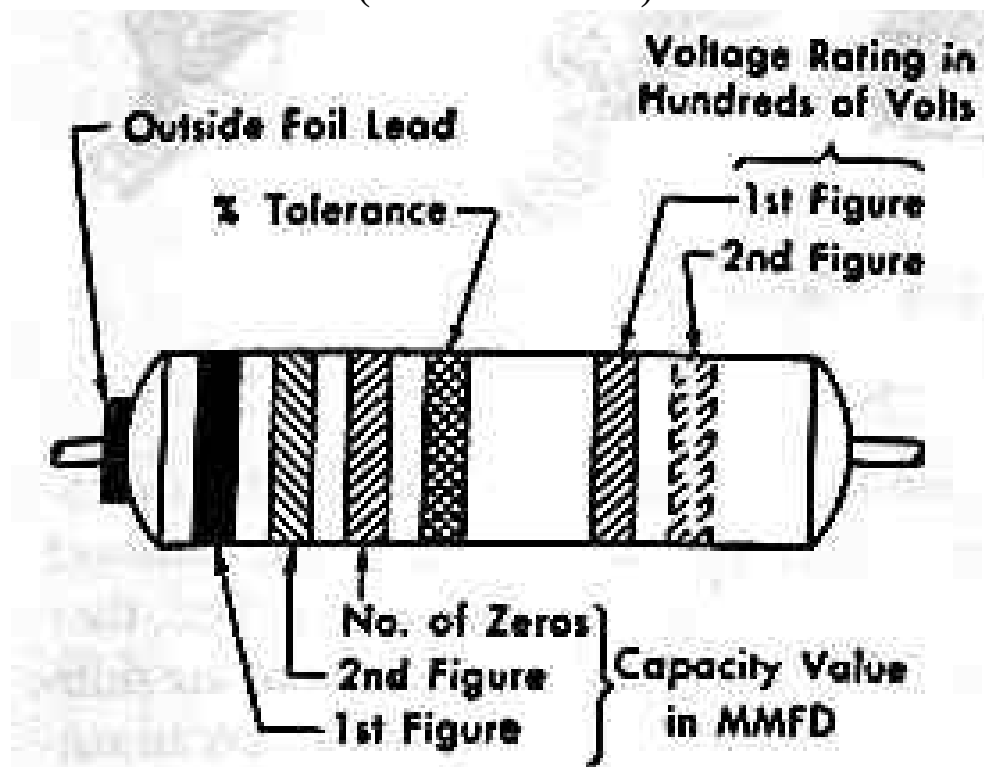


COLOR	1ST DIGIT	2ND DIGIT	MULTIPLIER	TOLERANCE (PERCENT)	VOLTAGE RATING
BLACK	0	0	1.0	± 1	100
BROWN	1	1	10	± 2	200
RED	2	2	100	± 3	300
ORANGE	3	3	1,000	± 4	400
YELLOW	4	4	10,000	± 5	500
GREEN	5	5	100,000	± 6	600
BLUE	6	6	1,000,000	± 7	700
VOLET	7	7	10,000,000	± 8	800
GRAY	8	8	100,000,000	± 9	900
WHITE	9	9	1,000,000,000		1000
GOLD			.1	± 10	2000
SILVER			.01	± 20	
BODY					

*WHERE NO COLOR IS INDICATED, THE VOLTAGE RATING MAY BE AS LOW AS 300 VOLTS.

CONDENSATEURS MOULÉS

(Black Beauties)



Example. 0.0047 MFD,
1,600 V D.C. $\pm 20\%$

Band	Color Code
1st	Yellow 4
2nd	Violet 7
3rd	Red 00
4th	Black $\pm 20\%$
5th	Brown } 1,600 V
6th	Blue }

Color	Significant Figure	No. of Zeros	Capacity Tolerance
Black	0		$\pm 20\%$
Brown	1	0	
Red	2	00	
Orange	3	000	$\pm 30\%$
Yellow	4	0000	$\pm 40\%$
Green	5	00000	$\pm 5\%$
Blue	6	000000	
Violet	7		
Gray	8		
White	9		$\pm 10\%$



CONDENSATEURS CÉRAMIQUES

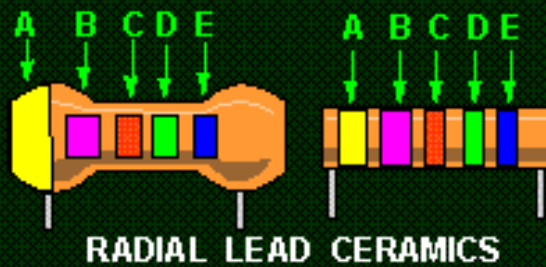
A - TEMPERATURE COEFFICIENT

B - 1ST DIGIT

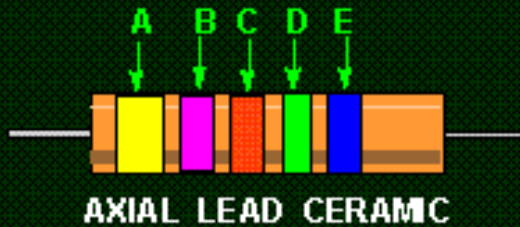
C - 2ND DIGIT

D - MULTIPLIER

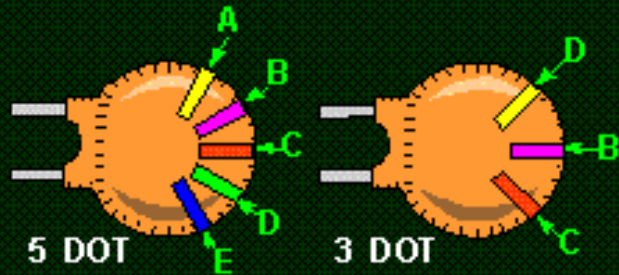
E - TOLERANCE



RADIAL LEAD CERAMICS



AXIAL LEAD CERAMIC



5 DOT 3 DOT
CERAMIC DISC CAPACITOR MARKING

COLOR	1ST DIGIT	2ND DIGIT	MULTIPLIER	TOLERANCE		TEMPERATURE COEFFICIENT*
				MORE THAN 10 pf (IN PERCENT)	LESS THAN 10 pf (IN pf)	
BLACK	0	0	1.0	± 20	± 2.0	0
BROWN	1	1	10	± 1		-30
RED	2	2	100	± 2		-80
ORANGE	3	3	1,000			-150
YELLOW	4	4	10,000			-220
GREEN	5	5		± 5	± 0.5	-330
BLUE	6	6				-470
VIOLET	7	7				-750
GRAY	8	8	.01		± 0.25	+30
WHITE	9	9	.1	± 10	± 1.0	+120 TO -750 (EIA) +500 TO -330 (JAN) +100 (JAN)
SILVER						BYPASS OR COUPLING
GOLD						

*PARTS PER MILLION PER DEGREE CENTIGRADE.

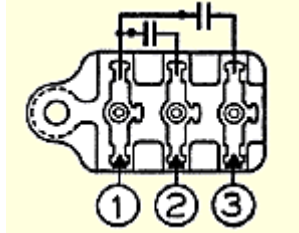
PHILCO « BAKELITE BLOCKS »

LA CONSTRUCTION INTERNE VARIE SELON LE NUMÉRO PHILCO.

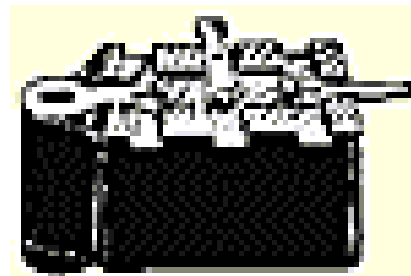
CONSULTER : <http://www.philcorepairbench.com/bblokcap.htm>

UNIVERSAL TYPE 3615 (.05 Mfd.)

Working Voltage 400



Part No.	No. of Cap. Sections	Capacity Wiring Lugs	
		1 & 3	1 & 2
3615-ODG	2	.05	.05
3615-ODU	1	.05	.05
3615-OSG	1	.05	- - -
3615-OSU	1	.05	- - -
3615-XG	2	.05	.0014
3615-YU	2	.05	.03

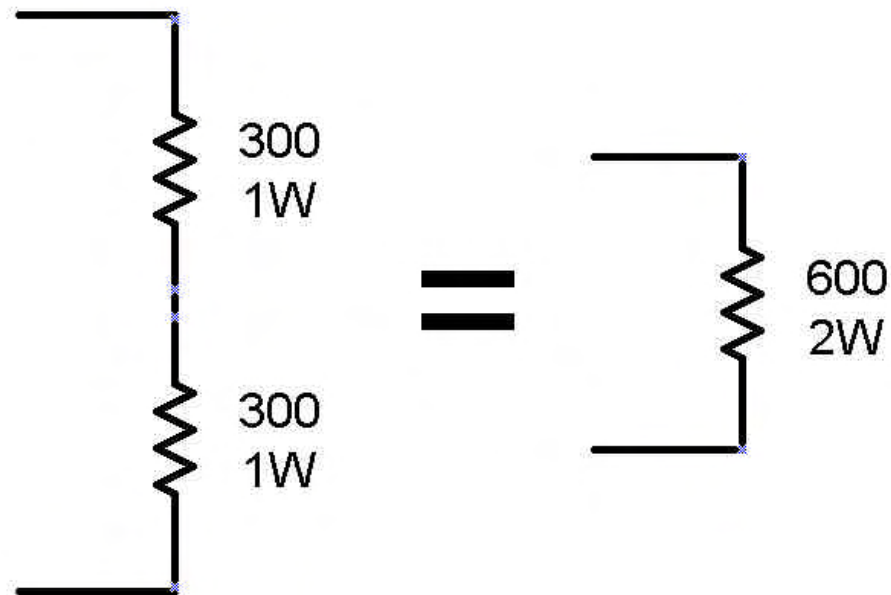


COMBINAISON DE RÉSISTANCES

MONTAGE SÉRIE:

- ?? LES VALEURS S'ADITIONNENT
- ?? LA PUISSANCE MAXIMALE S'ADITIONNENT

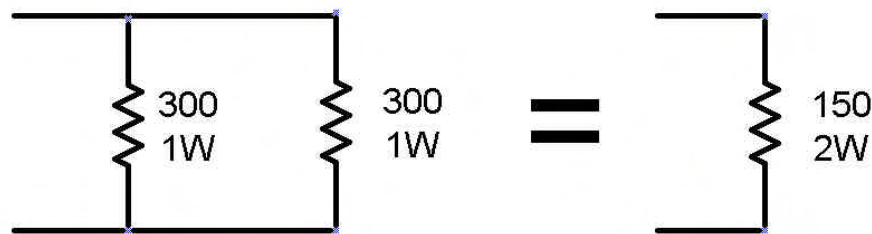
**SI LES RÉSISTANCES NE SONT PAS IDENTIQUES,
ATTENTION À LA RÉPARTITION DE LA PUISSANCE**



$$R_{\text{Total}} = R_1 + R_2 + \dots + R_n$$

MONTAGE PARALLÈLE:

- ?? LA RESISTANCE EST RÉDUITE
- ?? LA PUISSANCE MAXIMALE S'ADITIONNENT



$$R_{eq} = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \dots + \frac{1}{R_n}}$$

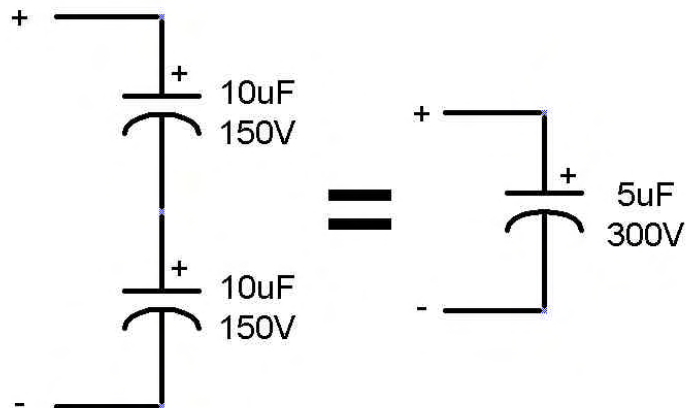
COMBINAISON DE CONDENSATEURS

MONTAGE SÉRIE:

?? LA CAPACITÉ EST RÉDUITE

?? LES TENSION MAXIMALE S'ADDITIONNENT

**SI LES CAPACITÉS NE SONT PAS IDENTIQUES,
ATTENTION À LA RÉPARTITION DE LA TENSION**

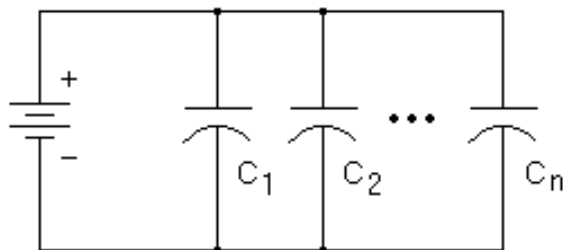
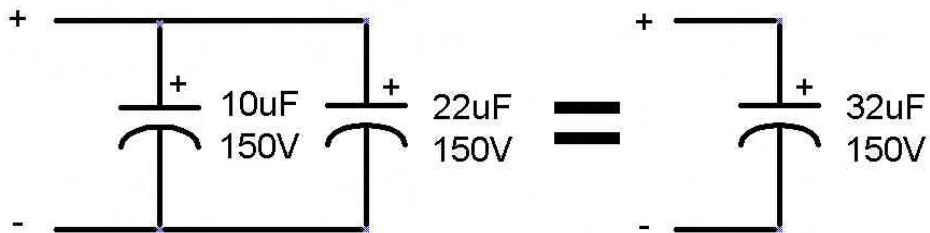


$$C_{\text{total}} = \frac{1}{\frac{1}{C_1} + \frac{1}{C_2} + \dots + \frac{1}{C_n}}$$

MONTAGE PARALLÈLE:

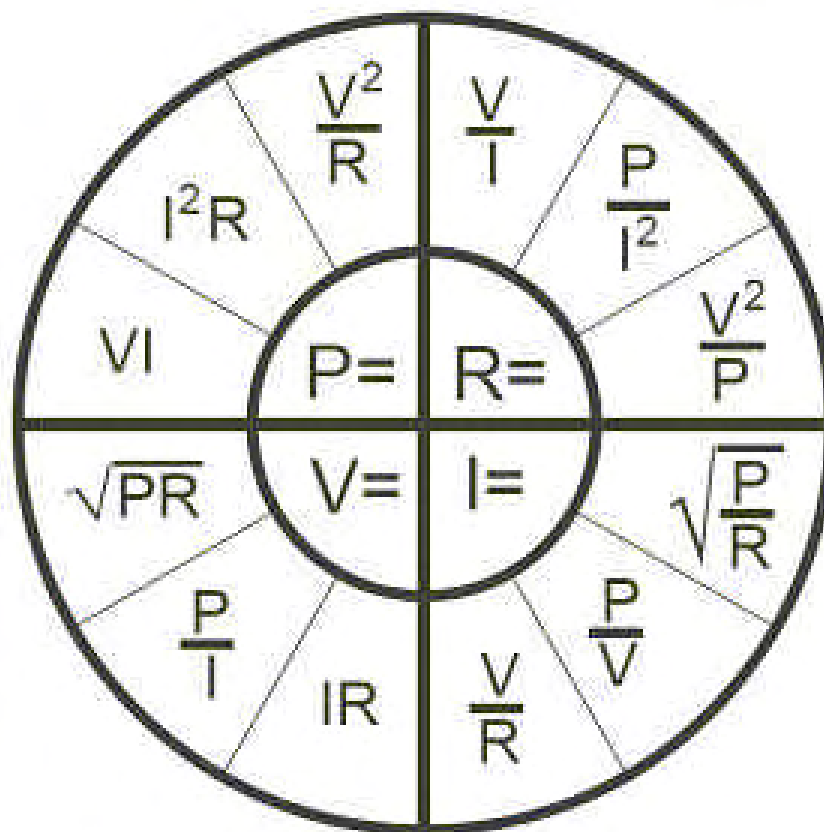
?? LA CAPACITÉ S'ADDITIONNE

?? LES TENSION MAXIMALE DEMEURE LA MÊME



$$C_{\text{Total}} = C_1 + C_2 + \dots + C_n$$

SOCIÉTÉ QUÉBÉCOISE DES COLLECTIONNEURS DE RADIOS ANCIENS
LA LOI D'OHM



P = PUISSANCE (WATTS [W])

V = TENSION (VOLTS [V])

I = COURANT (AMPÈRES [A])

R = RÉSISTANCE (OHMS [O])

**CE QU'ON CHERCHE :
INTÉRIEUR DU CERCLE**

**CE QU'ON CONNAIT :
EXTÉRIEUR DU CERCLE**

EX : $P = VI$, $V = P / I$