

Woman tone

Oil Capacitors

Instructions of use:

To choose an oil capacitor, you should take into consideration follow conditions:

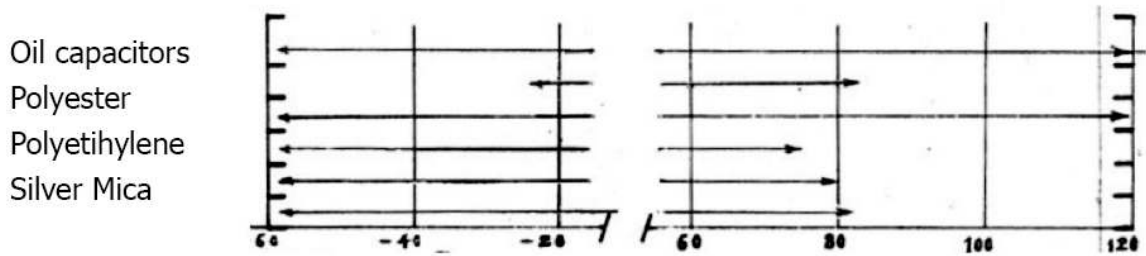
1) Temperature Range of use

It's known that, various characteristics of oil capacitors, suffer the influence of the temperature.

The maximum temperature utilized should be considered as a accumulated effect of the room temperature, transmitted heat by conduction, radiated heat and the heat by the presence of the alternating current. You should avoid increase the temperature range for use.

The picture bellow shows the temperature range for the use of the typical oil capacitor, and you can considerer it as a maximum limit, and it cannot be used for all types of oil capacitors.

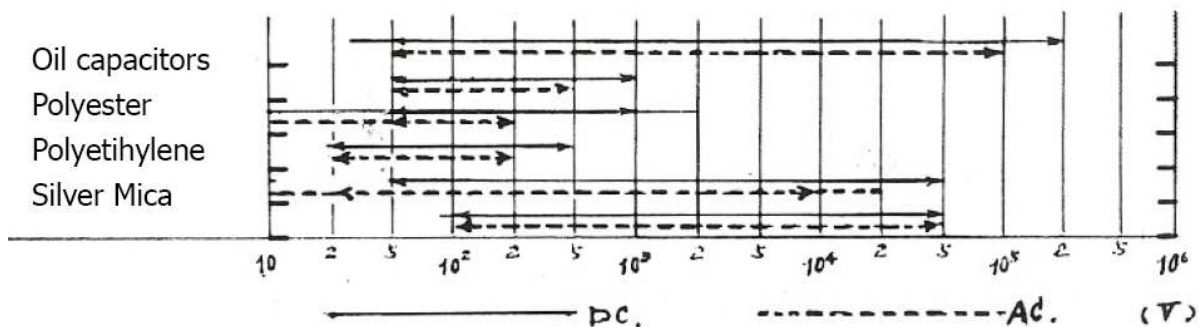
TYPE OF CAPACITORS



2) Voltage of use

The figure bellow shows the voltage range of use, inside the manufacturing possibilities for electronics in general.

VOLTAGE OF USE



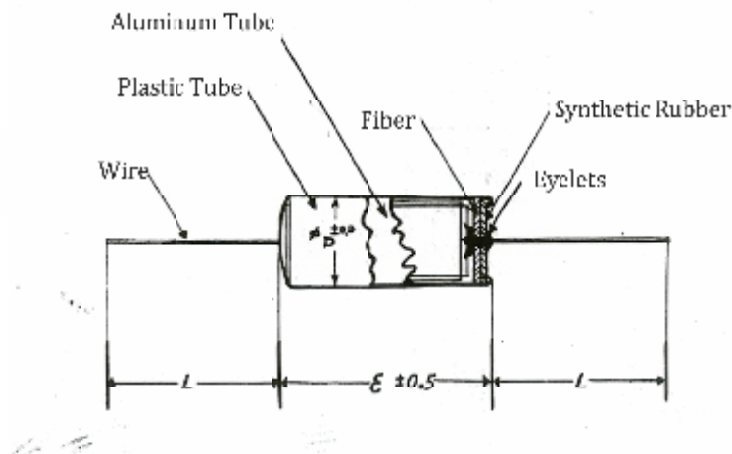
The element of the oil capacitor is made of fine paper sheets de 6u to 17u and aluminum foil of 6u to 8 u. They are winded and juxtaposed with the minimum of 6 sheets, being 4 as a minimum for the paper sheets and 2 for the aluminum foil.

The coils are impregnated with mineral oil. The impregnations of the mineral oil on paper create a dielectric material and the aluminum works as a electric electrode. We manufacture capacitors bellow for the make of radio, telecommunication, TV, etc.

A) Tubular type - coated with aluminum tube

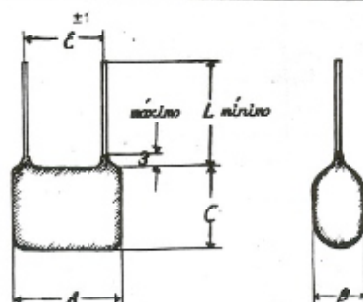
Impregnated with mineral oil

Format of wire deal - opposite direction



1 - Nominal Tension VD C, capacity and dimensions:

NOMINAL TENSION V D C	CAPACITY $\mu F \pm 10\%$	DIMENSIONS		
		A x B x C <i>máximo mm</i>	E x L <i>mm</i>	AWG <i>n.º</i>
400	.01	15 x 5 x 10	10 x 25	21 (0,71)
	.022	15 x 6 x 11	10 x 25	21
	.033	15 x 8 x 13	10 x 25	21
	.047	20 x 8 x 14	12 x 25	21
	.1	22 x 9 x 15	15 x 25	20 (0,81)
	.22	22 x 12 x 20	15 x 25	19 (0,91)
	.33	26 x 13 x 21	19 x 25	19
	.47	32 x 15 x 22	25 x 25	19



2 - Tolerance of capacity to a frequency of 1000 cycles at 25 Celsius.

5%

3 - Prove of Tension VDC

Twice the tension of work (1 minute)

4 - Reasonable temperature allowed in a work situation

From -20 Celsius to a +80 Celsius

5 - Angle (factor) of loss at frequency of 1000 cycles at 25 Celsius

Tan δ less or equal 15×10^{-3}

6 - Insulation Resistance at 500VDC (during 1 minute at 25 Celsius)

.001 to .056 UFabove 30.000 Megahom
.068 to .15 UF.....above 15.000 Megahom
.2 to .5 UFabove 5000 Megahom

7 - Connections

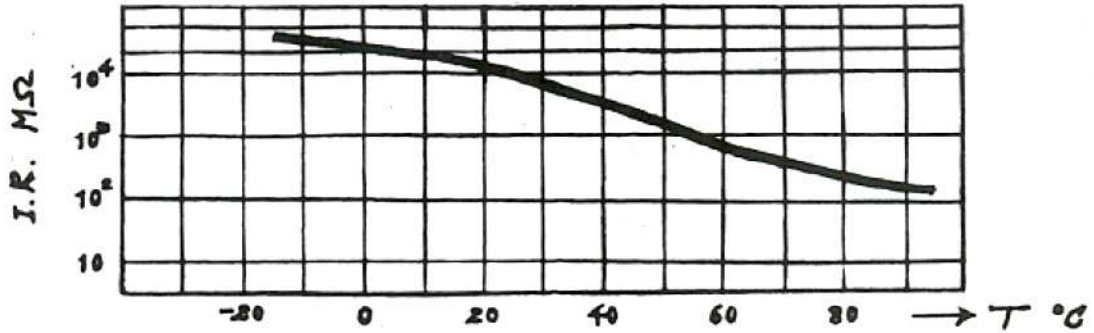
Safe and perfect even in high frequencies or low tension at 1mv in consequence of the special system of connection.

8 - Durability

Perfectly safe, without dangers of oil leakage or penetration of humidity , due to a double shielding protection , allowing for good and long storage.

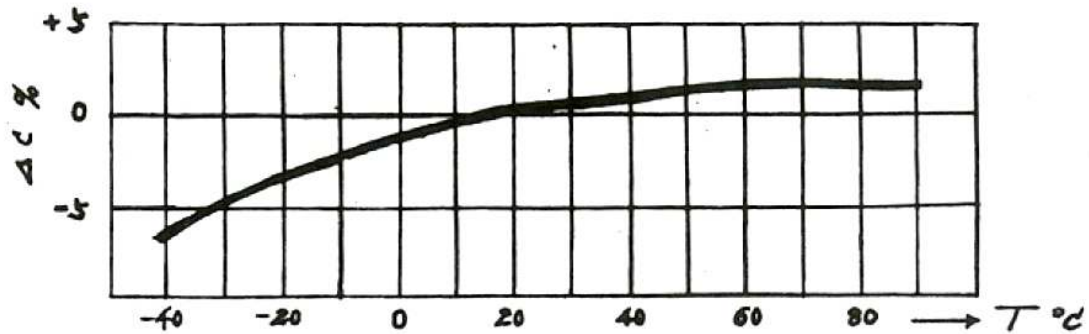
Variation of insulation resistance duo to temperature

Figure 1



Variation of capacity duo to temperature

Figure 2



Factor of loss in relation with temperature in 1000 cycles

Figure 3

