

2.
$$\frac{I_{\text{Ripple}}}{I_{\text{Ripple}@85^{\circ}\text{C}}} = \frac{18,9}{17,1} = 1,10$$

a. Crossing 1,10 and T = 70 °C expected life is about 14000 hours

Example 3:

- Capacitor AY(U)X-HR472M350DF1
- Working conditions: IRipple=25A@500Hz
- Ambient temperature =60°C

VN=350V

Capacitance	Case	Tanδ	ESRmax/typ		Zmax	Iripple55°C/85°C		Ordering Code
[μF]@100Hz		[%]@100Hz	[mΩ]@100Hz		[mΩ]@10KHz	[A]@100Hz	[A]@100Hz	(U) for mounting stud
4700	DF	0,08	27	20	17	23,9	17,1	AY(U)X-HR472M350DF1

3.
$$I_{\text{Ripple}} = \frac{25}{1,32} = 18,9$$

4.
$$\frac{I_{\text{Ripple}}}{I_{\text{Ripple}@85^{\circ}\text{C}}} = \frac{18,9}{17,1} = 1,10$$

a. Crossing 1,10 and T =60 °C expected life is about 36000 hours

Capacitor Connection

The aluminium electrolytic capacitors can be connected in parallel : the connection must be as such that the current flows equally through each unit

The aluminium electrolytic capacitors can be connected in series: use balancing resistors to control the voltage distribution across each unit.

For more detailed information contact our engineering service

Insulation Strength

-Insulation resistance @100V, 60". between terminals and mounting hardware =100 MΩ.

-Dielectric strength of the sleeve =2500VDC.

Self recharging (Dielectric Absorption)

It is important to take note that Aluminium Electrolytic Capacitors undergo to the phenomenon of self recharging .

Generally speaking it is impossible to give a precise rule to predict which voltage an unit, even when completely charged and discharged, can reach if left open circuit.

Itelcond has observed a maximum of 30 volt across the terminals but sometimes the value could be higher and not predictable.

It is therefore suggested to discharge the units before touching or connecting the terminals.