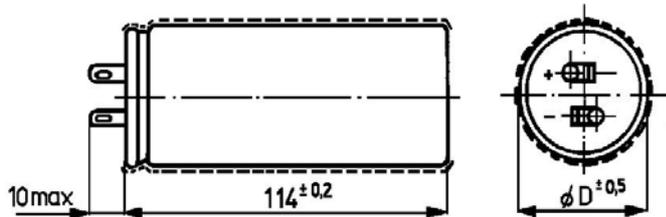


## TC 509 ALUMINIUM ELECTROLYTIC CAPACITORS FOR PULSE APPLICATIONS



**Dimensions:** D = 40 mm

**Warning!** The manufacturer is not responsible for any damages, caused by the improper installation and application. Before using the capacitor in any application, please, read carefully this technical data-sheet.

### Construction:

Aluminium electrodes, separated by paper saturated with an electrolyte. Dielectric is the aluminium oxide on the anode.

The aluminium cylindrical metallic case is not insulated from the system of the capacitor.

The leads are made by aluminium bands which are connected to the solder tags on the upper forehead of the case.

### Applications:

DC and pulse applications with higher pulse loading

### Technical data

**Rated voltage  $U_R$ :** 500/550V DC

Rated voltage is the max. DC or peak voltage, for which the capacitor is designed. If the capacitor works with the DC and also super-imposed AC voltage  $U_{AC}$ , the sum of DC and the amplitude of AC must not exceed the  $U_R$

**Rated capacitance:** 500µF

**Tolerance:** TC 509 A -0 ÷ +50%  
TC 509 B -20 ÷ +50%

### Dissipation factor $Tg\delta$ :

TC 509 A at 100Hz and +25°C < 0,09  
at 1kHz < 0,6

TC 509 B at 100Hz and +25°C < 0,2  
at 1kHz < 0,9

**Leakage current:** < 1,5 mA by 500VDC  
and +25°C

### Equivalent series resistance (ESR):

at 100kHz and +25°C < 0,09

TC 509 A < 100mΩ

TC 509 B < 250mΩ

### Operating temperature range: 0 ÷ +40°C

The highest permissible capacitor temperature at the hottest point of the case must not exceed +40°C.

**Operating life:** 10 000cycles,  $\Delta C/C$  < 15%

**Test voltage between terminals:** 550VDC,  
1min at +25°C,

All capacitors are tested by the routine test by the producer.

**Related standards:** IEC 60384-1

### Marking for purchase ordering:

TC 509A 500µF 500V DC