

Description

Low impedance
Low ESR
Wide frequency range

Applications

Power supplies
Hi-End electronics
Industrial electronics

Electrical characteristics

Operating temperature: -25 °C ÷ 70 °C
Rated voltage: 385VDC ÷ 500VDC
Rated capacitance: 47µF ÷ 800µF
Capacitance tolerance (at 100Hz, 20°C): -10% +30%
Dissipation factor (at 100Hz, 20°C): 0,15 ÷ 0,25
Leakage current (after 5 minutes application of rated voltage): $I = 0,005 \cdot C \cdot U$
I - current [µA]
C - rated capacitance [µF]
U - rated voltage [V]

The aluminum case capacitors are supplied with PVC sleeve insulation and a safety vent located on end-deck.

Load life:

Load life is 1000 hours (at maximum operating temperature, at rated voltage and AC current load as per Table 1).

After 1000 hours of the above application of rated voltage and current load, capacitors must meet the following characteristics requirements:

Capacitance change <= +/- 15% of initial value

Tan δ <= 150% of initial value

Leakage current <= initial value

AC Load:

The maximum AC load at maximum operating temperature (70°C) is given in Table 1. The AC load can be increased at lower operating temperatures by coefficient as per Table 2, with capacitor life expectancy unaffected.

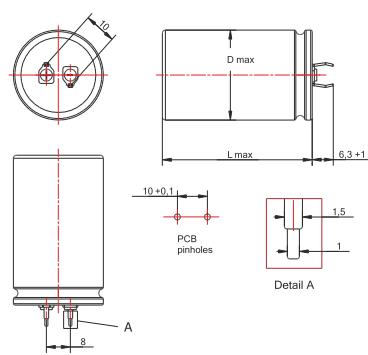
01
table

Type Number	Rated Capacitance C _N [μF]	Rated Voltage U _N [V]	Dimensions D _{max} x L _{max} [mm x mm]	Max. tanδ at 100Hz, 20 °C	Iac [mA]	Drawing Number
TE 030	47	385	22 x 42	0,15	250	1
TE 030	100	385	22 x 42	0,15	450	1
TE 030	150	385	25 x 42	0,15	540	1
TE 030	220	385	30 x 50	0,15	650	1
TE 030	330	385	30 x 50	0,15	800	1
TC 309	350	385	35 x 50	0,18	830	2
TC 309	550	385	35 x 68	0,18	1000	2
TC 309	800	385	35 x 88	0,18	1200	2
TE 050	47	500	22 x 42	0,18	160	1
TE 050	68	500	22 x 42	0,18	210	1
TE 050	100	500	25 x 42	0,18	300	1
TE 050	200	500	30 x 50	0,18	500	1
TC 509	250	500	35 x 68	0,25	600	2
TC 509	250	500	35 x 88	0,25	650	2
TC 509	250	500	35 x 114	0,25	1000	2
TC 509	500	500	35 x 88	0,25	1000	2
TC 509	800	500	40 x 90	0,25	1000	2
TC 529	16 + 16	500	35 x 50	0,20	100 + 100	3
TC 529	32 + 32	500	35 x 50	0,20	150 + 150	3
TC 529	50 + 50	500	35 x 50	0,20	200 + 200	3
TC 529	100 + 100	500	35 x 68	0,20	410 + 410	3
TC 549	40+20+20+20	500	40 x 50	0,20	160+ 3 x 80	4

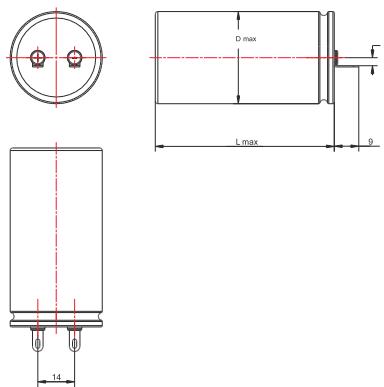
02
table

Coefficient for permissible Iac increase	2,3	2,0	1,7	1,53	1,3	1,15	1,0
Operating temperature	<= 40°C	45°C	50°C	55°C	60°C	65°C	70°C

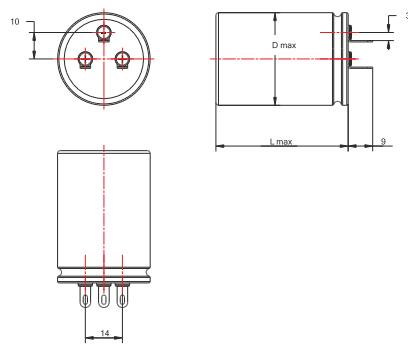
01



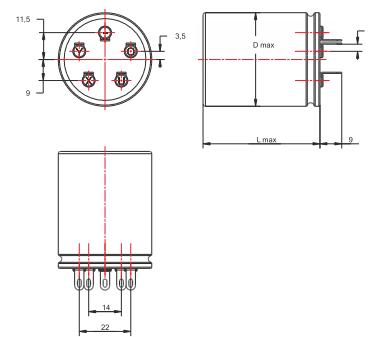
02



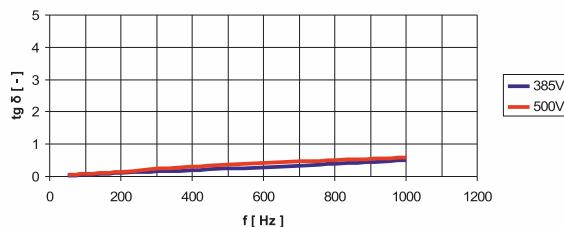
03



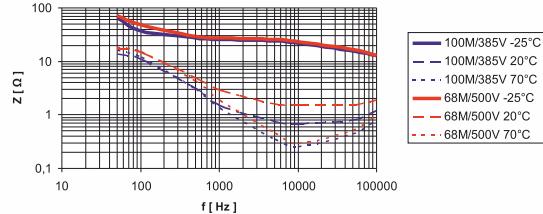
04



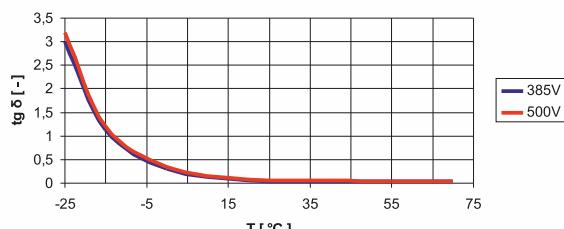
Dissipation factor vs. frequency



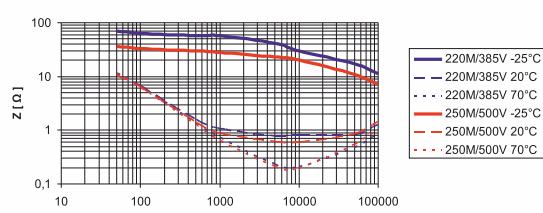
Impedance vs. frequency



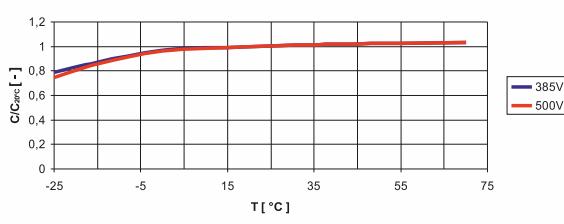
Dissipation factor vs. temperature



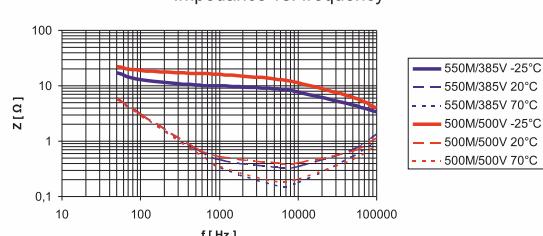
Impedance vs. frequency



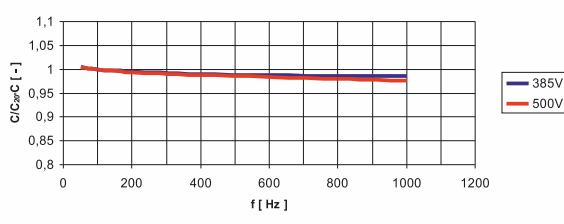
Capacitance vs. temperature



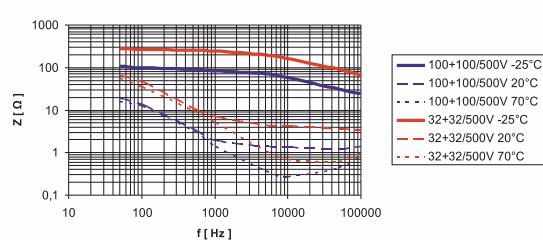
Impedance vs. frequency



Capacitance vs. frequency



Impedance vs. frequency



TC,TE series