

## 3. High Voltage DC Pulse Capacitors : STHVP-AN series

### Applications :

- High Voltage and High Current application
- Can be used for repetition frequency 1Hz to 10Hz
- High Voltage Switch Absorption
- Filter applications
- Pulse Discharge Circuit and Vibration
- Can be used in High-End Medical equipments
- Can be used in Semiconductor Industry
- Can be used in large electromechanical equipment protection facilities

### Features :

- Polypropylene film dielectric
- Low inductance
- Excellent Frequency Response
- RMS Current Rating
- High peak Pulse Current Ratings (dv/dt)
- Higher Temperature range
- DC Blocking / Ultra-Low Leakage version on request

### When compare with traditional Paper Dielectric, Oil Impregnated and Metal Enclosure Capacitor :

- Plastic enclosure : safer when compare with oil impregnated capacitor.
- Dry construction : Epoxy Resin end seal and doesn't have impregnant leakage problem
- Plastic enclosure and Epoxy Resin are flame retardant UL94-V0 grade
- higher Insulation Resistance and Insulation Voltage

### Electrical Characteristics :

**Rated Voltage :** 10kVdc – 20kVdc / 2,500Vac – 4,000Vac

**Capacitance range :** 0.1uF – 0.68uF with **Tolerance :** +/-10% at 23C

**Rated Temperature :** +70C / +85C

**Insulation Resistance :** 250Vdc +23C  $\geq$  50,000Mohm

**Testing Voltage** Terminal to Terminal :  $V_{peak} : 1.4 \times \text{rated Vdc}$  10 seconds at 23C  
 $V_{ac} : 1.4 \times \text{rated Vac}$  10 seconds at 23C

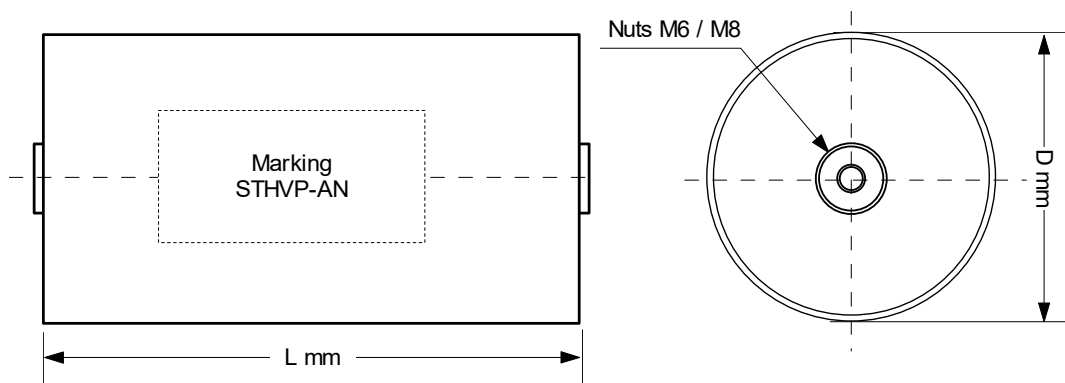
**Accelerated Life :** 1.25 x Vdc or Vac at rated Temperature for 2,000 hours

**Maximum Ripple Current :** up to 50A

**Peak discharge current - I peak :** up to 4500A

**Temperature range :** -25C to +70C / -25C to +85C ( depends on capacitor raw materials )

Ultra-Low Leakage version is available on request



**Specifications and Size :**  
**STHVP-AN : 10kVdc / 2500Vac**

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I <sub>p-p</sub> A	ESL nH	ESR (mohm) 100KHz	Max. Amp 70C	Max. Amp 85C
STHVP-AN224K10kD	0.22	65	185	5500	1210	45	5.5	20	15
STHVP-AN254K10kD	0.25	90	185	5500	1370	45	5.1	20	15
STHVP-AN334K10kD	0.33	90	185	5500	1810	45	4.6	30	25
STHVP-AN404K10kD	0.4	90	185	5500	2200	45	4.3	40	35
STHVP-AN504K10kD	0.5	90	185	5500	2750	45	3.9	45	40
STHVP-AN684K10kD	0.68	90	230	4300	2920	55	3.6	50	45

**STHVP-AN : 12kVdc / 3000Vac**

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I <sub>p-p</sub> A	ESL nH	ESR (mohm) 100KHz	Max. Amp 70C	Max. Amp 85C
STHVP-AN224K12kD	0.22	65	230	6000	1320	55	5.2	20	15
STHVP-AN254K12kD	0.25	65	230	6000	1500	55	4.8	20	15
STHVP-AN334K12kD	0.33	90	230	6000	1980	55	4.4	30	25
STHVP-AN404K12kD	0.4	90	230	6000	2400	55	4	40	35
STHVP-AN504K12kD	0.5	90	230	6000	3000	55	3.7	45	40

**STHVP-AN : 15kVdc / 3500Vac**

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I <sub>p-p</sub> A	ESL nH	ESR (mohm) 100KHz	Max. Amp 70C	Max. Amp 85C
STHVP-AN154K15kD	0.15	65	295	6500	970	80	5.6	20	15
STHVP-AN224K15kD	0.22	90	295	6500	1430	80	5.2	25	20
STHVP-AN334K15kD	0.33	90	295	6500	2140	80	4.7	40	35
STHVP-AN504K15kD	0.5	90	295	6500	3250	80	4.2	50	40

**STHVP-AN : 20kVdc / 4000Vac**

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I <sub>p-p</sub> A	ESL nH	ESR (mohm) 100KHz	Max. Amp 70C	Max. Amp 85C
STHVP-AN104K20kD	0.1	65	295	9000	900	80	6	15	10
STHVP-AN124K20kD	0.12	65	295	9000	1080	80	5.5	15	10
STHVP-AN154K20kD	0.15	90	295	9000	1350	80	5	20	15
STHVP-AN224K20kD	0.22	90	295	9000	1980	80	4.6	30	25
STHVP-AN254K20kD	0.25	90	295	9000	2250	80	4.2	40	35
STHVP-AN274K20kD	0.27	90	295	9000	2430	80	3.9	40	35
STHVP-AN334K20kD	0.33	90	295	9000	2970	80	3.8	40	35
STHVP-AN504K20kD	0.5	90	295	9000	4500	80	3.6	40	35

For any Capacitance, Voltage, dv/dt and Peak Pulse Discharge Current not listed, please contact us for a suggestion.