

## 4. High Voltage Energy Discharge Capacitors : STHVE-AN series

### Applications :

- High Voltage and High Current application
- Can be used for repetition frequency 1Hz to 50Hz
- 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 : the

- 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 :** 15kVdc – 30kVdc

**Capacitance range :** 0.1uF – 0.5uF with **Tolerance :** +/-10% at 23C

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

**Insulation Resistance :** 250Vdc +23C >= 50,000Mohm

**Testing Voltage** Terminal to Terminal : Vpeak : 1.4 x rated Vdc 10 seconds at 23C

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

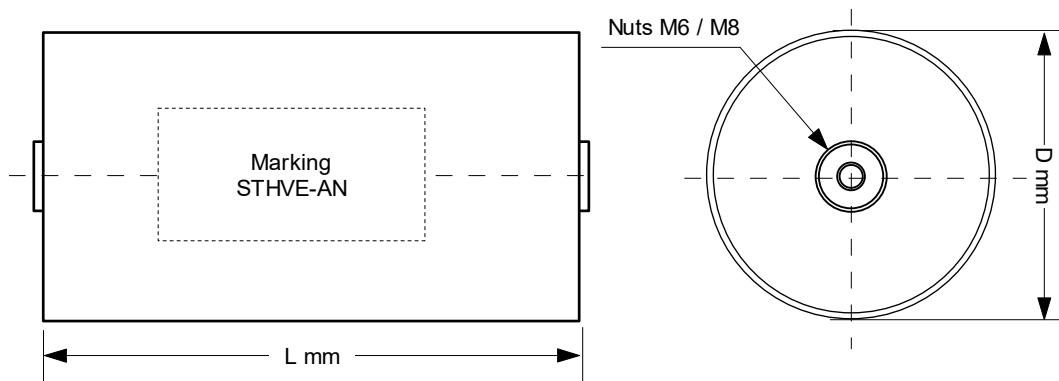
**Maximum Ripple Current :** up to 50A

**Peak discharge current - I peak :** up to 3500A

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

Ultra-Low Leakage version is available on request

Our capacitors can be customized according to the customer's requirement



**Specifications and Size :**  
**STHVE-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. Irms 70C	Max. Irms 85C
STHVE-AN154K15kD	0.15	65	240	6271	941	50	7	18	15
STHVE-AN224K15kD	0.22	90	240	6271	1380	50	6.7	20	17
STHVE-AN254K15kD	0.25	90	240	6271	1568	50	6.3	20	17
STHVE-AN274K15kD	0.27	90	240	6271	1693	50	6.1	30	25
STHVE-AN334K15kD	0.33	90	240	6271	2069	50	5.8	35	30
STHVE-AN504K15kD	0.5	90	295	6271	3136	60	5.5	50	45

**STHVE-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. Irms 70C	Max. Irms 85C
STHVE-AN154K20kD	0.15	65	295	6968	1045	60	8	20	15
STHVE-AN224K20kD	0.22	90	295	6968	1533	60	7.6	25	20
STHVE-AN254K20kD	0.25	90	295	6968	1742	60	7.2	30	25
STHVE-AN334K20kD	0.33	90	295	6968	2299	60	6.8	40	35
STHVE-AN504K20kD	0.5	90	295	6968	3484	60	6.5	50	45

**STHVE-AN : 25kVdc / 4500Vac**

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. Irms 70C	Max. Irms 85C
STHVE-AN104K25kD	0.1	65	295	8710	871	70	10	15	12
STHVE-AN124K25kD	0.12	65	295	8710	1045	70	9.2	18	15
STHVE-AN154K25kD	0.15	65	295	8710	1307	70	8.4	20	15
STHVE-AN224K25kD	0.22	90	295	8710	1916	70	7.6	25	20
STHVE-AN254K25kD	0.25	90	295	8710	2178	70	6.8	30	25
STHVE-AN274K25kD	0.27	90	295	8710	2352	70	6.0	30	25

**STHVE-AN : 30kVdc / 5000Vac**

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. Irms 70C	Max. Irms 85C
STHVE-AN104K30kD	0.1	65	295	10452	1045	70	10	15	12
STHVE-AN124K30kD	0.12	65	295	10452	1254	70	9.2	18	15
STHVE-AN154K30kD	0.15	65	295	10452	1568	70	8.4	20	15
STHVE-AN224K30kD	0.22	90	295	10452	2299	70	7.6	25	20
STHVE-AN254K30kD	0.25	90	295	10452	2613	70	6.8	30	25
STHVE-AN274K30kD	0.27	90	295	10452	2822	70	6.0	30	25

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