

HK Film Capacitor Ltd

1. Pulse Grade Capacitors – STR series

STR-01T-2.8, STR-01T-6.35, STR-02T, STR-02TM, STR-02RM, STR-03L, STR-03LM, STR-03LT, STR-03LTM (the above series configurations please refer the following drawing)

Applications :

- Electric Fence Energizer, Welding Energizer Equipment, High-intensity discharge lighting
- High energy storage pulse applications
- Capacitor can be direct short circuit at rated voltage without any protective component
- Can be used in Flash Lamps, Laser Lights, and Medical Equipment

Constructions :

Supporting different Capacitor Configurations, electrical connections, and mounting options to increase your design flexibility

Electrical Connections :

Tin-plated copper lead wire

Support Varies type Terminals :

~250 types 6.35mm,

~ flexible electrical lead wire UL1015 AWG#18/ 16 with female terminals,

~screw nuts or bolts M6 / M8 and other large size Terminals – which can deliver larger discharge current Ipp when compared with lead wires

Our capacitors can be customized and designed according to customers' requests.

Properties :

Low D.F. & Dielectric loss, High Discharge Current & Voltage Capabilities; High Insulation Resistance; AC and DC voltage; Flame Retardant Construction; Easy Installation

Mountings : Plastic Cylindrical Case : with stud – M8, M12 / without stud

Electrical Characteristics :

Rated Voltage : 900Vdc - 2,000Vdc (can customized design)

Capacitance range : 4uF - 200uF

Capacitance Tolerance : +/-5%; +/-10%

Dissipation factor (DF) : <0.1% 1KHz) at 23C

Maximum Ripple Current : up to 50A

Maximum Peak to Peak Current : up to 5400A

Testing Voltage : (can be customized design)

STR : Rated Voltage x 1.2Un 10sec +23C

Insulation Resistance : >=5000s at 100Vdc 60s +23C

Withstand Voltage between T-C : 3000Vac 50Hz 60s

Operate Temperature : -25C to +70C

Plastic case and Epoxy : Flame retardation UL94-V0

Options :

Thermocouple can be built-in :

- capacitor internal temperature can be measured
- output temperature signal can be used as one of reference signals in the circuit and trigger other function

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



Specifications and Size :

STR : 650Vdc / 780Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
8	650	35	55	200	25
10	650	35	55	250	25
12	650	35	55	300	25
16	650	35	55	400	25
20	650	40	55	500	25
25	650	45	55	625	25
30	650	40	73	450	15
35	650	45	73	525	15
40	650	45	73	600	15
50	650	45	128	500	10
60	650	45	128	600	10
70	650	45	128	700	10
80	650	45	128	800	10
100	650	65	140	1000	10
120	650	65	140	1200	10
150	650	65	140	1500	10
200	650	65	140	2000	10

STR : 800Vdc / 960Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
8	800	35	55	216	27
10	800	35	55	270	27
12	800	35	55	324	27
16	800	35	55	432	27
20	800	40	55	540	27
25	800	45	55	675	27
30	800	45	73	540	18
35	800	45	73	630	18
40	800	45	73	720	18
50	800	45	128	600	12
60	800	45	128	720	12
70	800	45	128	840	12
80	800	45	128	960	12
100	800	65	140	1200	12
120	800	65	140	1440	12
150	800	65	140	1800	12
200	800	65	140	2400	12

For other Capacitance, Voltage (peak-to-peak), dv/dt and peak-to-Peak Current, please contact us for a suggestion.

STR : 900Vdc / 1080Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
40	900	45	128	1000	25
50	900	45	128	1250	25
60	900	65	118	1620	27
80	900	65	118	2160	27
100	900	65	118	2700	27
120	900	90	118	3240	27
150	900	90	118	4050	27
180	900	90	118	4860	27
200	900	90	118	5400	27

STR : 1000Vdc / 1200Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
4.7	1000	30	55	141	30
5	1000	30	55	150	30
6	1000	30	55	180	30
6	1000	35	55	180	30
8	1000	30	55	240	30
8	1000	35	55	240	30
10	1000	35	55	300	30
12	1000	35	55	360	30
16	1000	35	73	320	20
20	1000	40	73	400	20
25	1000	45	73	500	20
30	1000	45	73	600	20
35	1000	45	128	630	18
40	1000	45	128	720	18
50	1000	45	128	900	18
60	1000	65	140	780	13
70	1000	65	140	910	13
80	1000	65	140	1040	13
100	1000	65	140	1300	13
120	1000	65	140	1560	13

STR : 1100Vdc / 1320Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
40	1100	45	128	1400	35
50	1100	65	118	1900	38
60	1100	65	118	2280	38
80	1100	65	118	3040	38
100	1100	90	118	3800	38
120	1100	90	118	4560	38

For other Capacitance, Voltage (peak-to-peak), dv/dt and peak-to-Peak Current, please contact us for a suggestion.

STR : 1200Vdc / 1450Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
4.7	1200	30	55	188	40
5	1200	30	55	200	40
6	1200	30	55	240	40
8	1200	35	55	320	40
10	1200	40	55	400	40
12	1200	45	55	480	40
16	1200	45	73	400	25
20	1200	45	73	500	25
25	1200	45	128	550	22
30	1200	45	128	660	22
35	1200	45	128	700	20
40	1200	65	140	800	20
50	1200	65	140	1000	20
60	1200	65	140	1200	20
70	1200	65	140	1400	20
80	1200	65	140	1600	20

STR : 1300Vdc / 1560Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
4	1300	30	55	200	50
5	1300	35	55	250	50
6	1300	35	55	300	50
8	1300	40	55	400	50
10	1300	45	55	500	50
12	1300	45	73	420	35
16	1300	45	73	480	30
20	1300	45	128	440	22
25	1300	45	128	550	22
30	1300	45	128	660	22
35	1300	65	140	770	22
40	1300	65	140	880	22
45	1300	65	140	990	22
47	1300	65	140	1034	22
50	1300	65	140	1100	22
60	1300	65	140	1320	22
70	1300	65	140	1540	22

STR : 1450Vdc / 1800Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
8	1450	65	140	400	50
10	1450	65	140	500	50
12	1450	65	140	600	50
15	1450	65	140	750	50
16	1450	65	140	800	50

For other Capacitance, Voltage (peak-to-peak), dv/dt and peak-to-Peak Current, please contact us for a suggestion.

STR : 1500Vdc / 1800Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
40	1500	90	250	1520	38
50	1500	90	250	1900	38
60	1500	90	250	2280	38
80	1500	90	250	3040	38
100	1500	90	250	3800	38

STR : 1600Vdc / 2000Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
6	1600	65	140	360	60
8	1600	65	140	480	60
10	1600	65	140	600	60
12	1600	65	140	720	60

STR : 2000Vdc / 2400Vdc peak to peak

Cn uF	Voltage Vdc	Diameter mm	Length mm	Peak Current I _{p-p} A	dv/dt V/us
30	2000	65	250	1260	42
40	2000	90	250	1680	42
50	2000	90	250	2100	42
60	2000	90	250	2520	42

For other Capacitance, Voltage (peak-to-peak), dv/dt and peak-to-Peak Current, please contact us for a suggestion.

Cylindrical Capacitor Configurations - Electrical Connection and Mounting : need CHANGE name

The above packaging configuration can be applied for all cylindrical type capacitors.

