

9 High Voltage IGCT Capacitors : STIGD-AN series

Applications :

- Power switches
- Inverters, adjustable frequency converters, drives
- Electronic power equipment
- High-speed use of railway grid interties

Features :

- high current
- high peak current
- Ultra-high insulation
- low loss
- Ultra-low inductance
- Ultra-low ESR
- M8 screw threads/nut as capacitor electrical terminal

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

- Plastic enclosure : safer when compare with oil impregnated capacitor, especially high voltage application.
- Dry construction : Epoxy Resin end seal and doesn't have impregnant leakage problem
- Plastic enclosure and Epoxy Resin are flame retardant UL94-V0 grade
- compact size and light weight
- Higher Insulation Resistance and Insulation Voltage
- Low capacitor loss
- DC Blocking / Ultra-Low Leakage version on request

Electrical Characteristics :

Rated Voltage : 3,000Vdc – 7,200Vdc / 1,700Vac – 4,200Vac

Capacitance : 0.1uF – 0.5uF

Maximum Ripple Current : up to 70A at 70C

Peak discharge current - I peak : up to 6200A

Tolerance : +/-10%, +/-5% at 22C 1kHz,

Testing Voltage : Peak Voltage (Vp) - Vdc / Vac x 1.5Un 60sec (can be customized design)
Surge Voltage (Vs) - Vdc / Vac x 2Un 10sec (can be customized design)

Insulation Resistance :250Vdc +23C >= 100,000Mohm

Low ESR and series Inductance

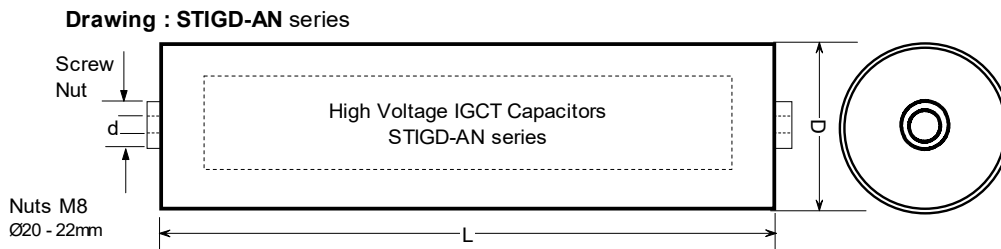
Temperature range : +70C / +85C (depends on capacitor raw materials)

Ultra-Low Leakage version is available on request

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



Drawing :



Specifications and Size :
STIGD-AN : 3000Vdc / 1200Vrms

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I _{p-p} A	ESL nH	ESR (mohm) 100KHz	Max. I _{rms} 70C	Rθ C/W +70C
STIGD-AN224K3000D	0.22	65	155	12000	2600	13	1.8	40	3.50
STIGD-AN334K3000D	0.33	65	155	12000	3900	13	1.2	45	3.20
STIGD-AN504K3000D	0.5	90	155	12000	6000	13	0.9	50	3.10

STIGD-AN : 4000Vdc / 1600Vrms

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I _{p-p} A	ESL nH	ESR (mohm) 100KHz	Max. I _{rms} 70C	Rθ C/W +70C
STIGD-AN104K4000D	0.1	65	155	19000	1900	14	2.9	30	3.84
STIGD-AN224K4000D	0.22	65	155	19000	4100	14	1.4	50	2.85
STIGD-AN254K4000D	0.25	90	155	19000	4700	14	1.2	50	2.67
STIGD-AN334K4000D	0.33	90	155	19000	6200	14	0.92	60	2.40

STIGD-AN : 6000Vdc / 1700Vrms

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I _{p-p} A	ESL nH	ESR (mohm) 100KHz	Max. I _{rms} 70C	Rθ C/W +70C
STIGD-AN104K6000D	0.1	65	220	20000	2000	15	4.2	40	2.23
STIGD-AN124K6000D	0.12	65	220	20000	2400	15	3.5	40	2.14
STIGD-AN154K6000D	0.15	90	220	20000	3000	15	2.8	50	1.72
STIGD-AN224K6000D	0.22	90	220	19000	4100	15	1.9	50	1.68
STIGD-AN254K6000D	0.25	90	220	20000	5000	15	1.7	60	1.30

STIGD-AN : 7200Vdc / 2000Vrms

P/N :	Cn uF	Diameter D mm	Length L mm	dv/dt v/us	Peak Current I _{p-p} A	ESL nH	ESR (mohm) 100KHz	Max. I _{rms} 70C	Rθ C/W +70C
STIGD-AN823K7200D	0.082	65	295	24000	1900	20	5.1	40	2.45
STIGD-AN104K7200D	0.1	65	295	24000	2400	20	4.2	40	2.23
STIGD-AN124K7200D	0.12	90	295	24000	2800	20	3.5	40	2.14
STIGD-AN154K7200D	0.15	90	295	24000	3600	20	2.5	50	1.92

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