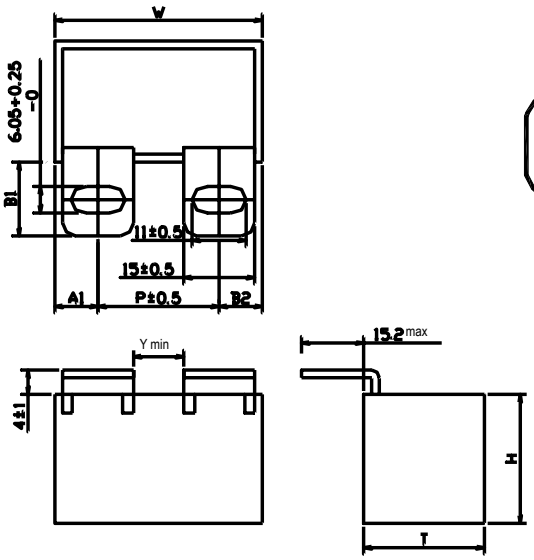
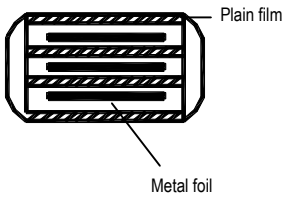
IGBT film foil structure snubber capacitors KPC

■ Outline Drawing



■ Construction



■ Appearance

KPC are polypropylene film , aluminium foil . Non-inductive winding construction, extended foil impregnated UL class 94V-0 preformed case with thermosetting resin fill, Terminals tinned copper. Power semiconductor devices require fast switching and low loss characteristics.
These characteristics demand snubber capacitors which have very low losses, high dv/dt and low series inductance.

■ FEATURES:

◆Polypropylene as dielectric for achieving low losses
◆Aluminium foil as electrodes to achieve maximum dv/dt
◆ Special mechanical construction to achieve minimum series inductance
◆Impregnated elements to eliminate corona

■ SPECIFICATION:

1. CAPACITANCE RANGE：
   0.1μF~ 3μF MEASURED AT 1 KHZ AND 25℃
2. CAPACITY TOLERANCE：±5%(J), ±10%(K)
3. RATED VOLTAGE VDC：1000, 1250, 1500, 2000
4. TEST VOLTAGE BETWEEN TERMINALS：
   2.5 X RATED VOLTAGE VDC FOR 10 SECONDS
   TEST VOLTAGE TERMINAL TO CASE：
   3KV AT 50HZ FOR 60 SECONDS
5. DISSIPATION FACTOR(TAN δ)：
   ≦5 X 10^{-4} AT 1KHZ AND 25℃
6. TEMPERATURE RANGE：-40℃ ~ +85℃
7. EQUIVALENT SERIES INDUCTANCE(ESL)：
   THE VALUE IS DETERMINED BY THE TERMINAL OPTION SELECTED AND IS MEASURED AT RESONANCE
8. INSULATION RESISTANCE AT 25℃ AT A TEST VOLTAGE OF 500VDC APPLIED FOR 1 MINUTE：
   C≦0.33μF 100000MΩ ;C>0.33μF 30000 MΩ

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■ DIMENSIONS:

WORKING VOLTAGE 1000VDC (480VAC AT 50 Hz)										
Part number	CAP	Dimensions					Dv/Dt V/μ sec	1 Peak Amps	1rmsat 100KHz &55℃	ESR Max at100kHz mΩ
		W	H	T	P	Ymin				
KPC104□4AC2B7□□□□	0.1	32	20	11	27.5	-	900	90	5.6	11.2
KPC154□4AC2B7□□□□	0.15	32	20	11	27.5	-	900	135	5.7	10.8
KPC224□4AC2B7□□□□	0.22	32	24	14	27.5	-	900	198	6.8	10.4
KPC224□4AD1B5□□□□	0.22	41.5	29	17	25.5	8.5	900	198	18.2	4.2
KPC224□4AD1B5□□□A	0.22	41.5	29	17	25.5	-	900	198	18.2	4.2
KPC224□4AD1B5□□□□	0.22	41.5	29	17	25.5	11.5	900	198	18.2	4.2
KPC224□4AC400□□□□	0.22	34	33	18	-	-	900	1989	18.2	4.2
KPC274□4AD1B5□□□□	0.27	41.5	29	17	25.5	8.5	900	198	18.2	4.2
KPC274□4AD1B5□□□A	0.27	41.5	29	17	25.5	-	900	198	18.2	4.2
KPC274□4AD1B5□□□B	0.27	41.5	29	17	25.5	11.5	900	198	18.2	4.2
KPC274□4AC400□□□□	0.27	34	33	18	-	-	900	243	18.7	4.0
KPC334□4AD5B7□□□□	0.33	45	30	28	27.0	11.5	900	297	19.7	3.7
KPC334□4AD5C9□□□A	0.33	45	30	28	39.0	-	900	297	19.7	3.7
KPC334□4AC400□□□□	0.33	34	33	18	-	-	900	297	19.7	3.7
KPC394□4AD5B7□□□□	0.39	45	30	28	27.0	11.5	900	351	20.6	3.7
KPC394□4AD5C9□□□A	0.39	45	30	28	39.0	-	900	351	20.6	3.7
KPC394□4AC400□□□□	0.39	34	33	18	-	-	900	351	20.6	3.7
KPC474□4AD5B7□□□□	0.47	45	30	28	27.0	11.5	900	423	21.1	3.5
KPC474□4AD5C9□□□A	0.47	45	30	28	39.0	-	900	423	21.1	3.5
KPC564□4AD5B7□□□□	0.56	45	30	28	27.0	11.5	800	392	21.3	3.5
KPC564□4AD5C9□□□A	0.56	45	30	28	39.0	-	800	392	21.3	3.5
KPC684□4AD5B7□□□□	0.68	45	30	28	27.0	11.5	800	476	21.3	3.5
KPC684□4AD5C9□□□A	0.68	45	30	28	39.0	-	800	476	21.3	3.5
KPC754□4AD5B7□□□□	0.75	45	30	28	27.0	11.5	800	525	25.6	3.2
KPC754□4AD5C9□□□A	0.75	45	30	28	39.0	-	800	525	25.6	3.2
KPC824□4AD5B7□□□□	0.82	45	30	28	27.0	11.5	800	574	26.0	3.0
KPC824□4AD5C9□□□A	0.82	45	30	28	39.0	-	800	574	26.0	3.0
KPC105□4AD5B7□□□□	1.00	45	30	28	27.0	11.5	900	900	26.0	3.0
KPC105□4AC5C9□□□A	1.00	45	30	28	39.0	-	900	900	26.0	3.0
KPC105□4AD5B7□□□B	1.00	45	45	30	27.0	11.5	900	900	26.0	3.0
KPC125□4AD5B7□□□□	1.20	45	45	30	27.0	11.5	800	960	26.0	2.5
KPC155□4AD5B7□□□□	1.50	45	45	30	27.0	11.5	800	1200	26.0	2.5
KPC175□4AE4B7□□□□	1.75	54	50	30	27.0	11.5	500	875	28.0	2.5
KPC205□4AE4B7□□□□	2.00	54	50	30	27.0	11.5	500	1000	28.2	2.5
KPC225□4AE4B7□□□□	2.20	54	50	40	27.0	11.5	400	880	28.5	2.4
KPC255□4AE4B7□□□□	2.50	54	50	40	27.0	11.5	400	1000	29.0	2.2
KPC355□4AE4B7□□□□	3.00	54	50	40	27.0	11.5	400	1200	30.0	2.0

IGBT film foil structure snubber capacitors KPC

WORKING VOLTAGE 1250VDC (550VAC AT 50 Hz)										
Part number	CAP	Dimensions					Dv/Dt V/μ sec	1 Peak Amps	1rmsat 100KHz &55℃	ESR Max at100kHz mΩ
		W	H	T	P	Ymin				
KPC104□4BC2B7□□□□	0.1	32	20	11	27.5	-	1000	100	5.6	11.2
KPC154□4BC2B7□□□□	0.15	32	20	11	27.5	-	1000	150	5.7	10.8
KPC224□4BC2B7□□□□	0.22	32	24	14	27.5	-	1000	220	6.8	10.4
KPC224□4BD1B5□□□A	0.22	41.5	29	17	25.5	8.5	1000	220	18.2	4.2
KPC224□4BD1B5□□□B	0.22	41.5	29	17	25.5	-	1000	220	18.2	4.2
KPC224□4BD1B5□□□C	0.22	41.5	29	17	25.5	11.5	1000	220	18.2	4.2
KPC224□4BC400□□□□	0.22	34	33	18	-	-	1000	220	18.2	4.2
KPC274□4BD1B5□□□□	0.27	41.5	29	17	25.5	8.5	1000	270	18.2	4.2
KPC274□4BD1B5□□□A	0.27	41.5	29	17	25.5	-	1000	270	18.2	4.2
KPC274□4BD1B5□□□B	0.27	41.5	29	17	25.5	11.5	1000	270	18.2	4.2
KPC274□4BC400□□□□	0.27	34	33	18	-	-	1000	270	18.7	4.0
KPC334□4BD5B7□□□□	0.33	45	30	28	27.0	11.5	1000	330	19.7	3.7
KPC334□4BD5C9□□□□	0.33	45	30	28	39.0	-	1000	330	19.7	3.7
KPC334□4BC400□□□□	0.33	34	33	18	-	-	1000	330	19.7	3.7
KPC394□4BD5B7□□□A	0.39	45	30	28	27.0	11.5	1000	390	20.6	3.7
KPC394□4BD5C9□□□B	0.39	45	30	28	39.0	-	1000	390	20.6	3.7
KPC394□4BC400□□□□	0.39	34	33	18	-	-	1000	390	20.6	3.7
KPC474□4BD5B7□□□□	0.47	45	30	28	27.0	11.5	1000	470	21.1	3.5
KPC474□4BD5C9□□□A	0.47	45	30	28	39.0	-	1000	470	21.1	3.5
KPC564□4BD5B7□□□□	0.56	45	30	28	27.0	11.5	1000	560	21.3	3.5
KPC564□4BD5C9□□□□	0.56	45	30	28	39.0	-	1000	560	21.3	3.5
KPC684□4BD5B7□□□□	0.68	45	30	28	27.0	11.5	900	612	21.3	3.5
KPC684□4BD5C9□□□□	0.68	45	30	28	39.0	-	900	612	21.3	3.5
KPC754□4BD5B7□□□□	0.75	45	30	28	27.0	11.5	900	675	25.6	3.2
KPC754□4BD5C9□□□□	0.75	45	30	28	39.0	-	900	675	25.6	3.2
KPC824□4BD5B7□□□□	0.82	45	30	28	27.0	11.5	900	738	26.0	3.0
KPC824□4BD5C9□□□□	0.82	45	30	28	39.0	-	900	738	26.0	3.0
KPC105□4BD5B7□□□□	1.00	45	30	28	27.0	11.5	900	900	26.0	3.0
KPC105□4BC5C9□□□□	1.00	45	30	28	39.0	-	900	900	26.0	3.0
KPC105□4BD5B7□□□□	1.00	45	45	30	27.0	11.5	1000	1000	26.0	3.0
KPC125□4BD5B7□□□□	1.20	45	45	30	27.0	11.5	900	1080	26.0	2.5
KPC155□4BD5B7□□□□	1.50	45	45	30	27.0	11.5	900	1350	26.0	2.5
KPC175□4BE4B7□□□□	1.75	54	50	30	27.0	11.5	600	1050	28.0	2.5
KPC205□4BE4B7□□□□	2.00	54	50	30	27.0	11.5	600	1100	28.2	2.5
KPC225□4BE4B7□□□□	2.20	54	50	40	27.0	11.5	500	880	28.5	2.4
KPC255□4BE4B7□□□□	2.50	54	50	40	27.0	11.5	500	1250	29.0	2.2
KPC355□4BE4B7□□□□	3.00	54	50	40	27.0	11.5	500	1500	30.0	2.0

IGBT film foil structure snubber capacitors KPC

WORKING VOLTAGE 1500VDC (630VAC AT 50 Hz)											
Part number	CAP	Dimensions					Dv/Dt V/μ sec	1 Peak Amps	1rmsat 100KHz &55℃	ESR Max at100kHz mΩ
		W	H	T	P	Ymin				
KPC104□3CC2B7□□□□	0.1	32	20	11	27.5	-	1100	110	5.6	11.2
KPC154□3CC2B7□□□□	0.15	32	20	11	27.5	-	1100	165	5.7	10.8
KPC224□3CC2B7□□□□	0.22	32	24	14	27.5	-	1100	242	6.8	10.4
KPC224□3CD1B5□□□□	0.22	41.5	29	17	25.5	8.5	1100	242	18.2	4.2
KPC224□3CD1B5□□□A	0.22	41.5	29	17	25.5	-	1100	242	18.2	4.2
KPC224□3CD1B5□□□B	0.22	41.5	29	17	25.5	11.5	1100	242	18.2	4.2
KPC224□3CC400□□□□	0.22	34	33	18	-	-	1100	242	18.2	4.2
KPC274□3CD1B5□□□□	0.27	41.5	29	17	25.5	8.5	1100	243	18.2	4.2
KPC274□3CD1B5□□□A	0.27	41.5	29	17	25.5	-	1100	243	18.2	4.2
KPC274□3CD1B5□□□B	0.27	41.5	29	17	25.5	11.5	1100	297	18.2	4.2
KPC274□3CC400□□□□	0.27	34	33	18	-	-	1100	297	18.7	4.0
KPC334□3CD5B7□□□□	0.33	45	30	28	27.0	11.5	1100	363	19.7	3.7
KPC334□3CD5C9□□□A	0.33	45	30	28	39.0	-	1100	363	19.7	3.7
KPC334□3CC400□□□□	0.33	34	33	18	-	-	1100	363	19.7	3.7
KPC394□3CD5B7□□□□	0.39	45	30	28	27.0	11.5	1100	429	20.6	3.7
KPC394□3CD5C9□□□□	0.39	45	30	28	39.0	-	1100	429	20.6	3.7
KPC394□3CC400□□□□	0.39	34	33	18	-	-	1100	429	20.6	3.7
KPC474□3CD5B7□□□□	0.47	45	30	28	27.0	11.5	1100	517	21.1	3.5
KPC474□3CD5C9□□□□	0.47	45	30	28	39.0	-	1100	517	21.1	3.5
KPC564□3CD5B7□□□□	0.56	45	30	28	27.0	11.5	1000	560	21.3	3.5
KPC564□3CD5C9□□□□	0.56	45	30	28	39.0	-	1000	560	21.3	3.5
KPC684□3CD5B7□□□□	0.68	45	30	28	27.0	11.5	1000	680	21.3	3.5
KPC684□3CD5C9□□□□	0.68	45	30	28	39.0	-	1000	680	21.3	3.5
KPC754□3CD5B7□□□□	0.75	45	30	28	27.0	11.5	1000	750	25.6	3.2
KPC754□3CD5C9□□□□	0.75	45	30	28	39.0	-	1000	750	25.6	3.2
KPC824□3CD5B7□□□□	0.82	45	30	28	27.0	11.5	1000	820	26.0	3.0
KPC824□3CD5C9□□□□	0.82	45	30	28	39.0	-	1000	820	26.0	3.0
KPC105□3CD5B7□□□□	1.00	45	30	28	27.0	11.5	1000	1000	26.0	3.0
KPC105□3CC5C9□□□□	1.00	45	30	28	39.0	-	1000	1000	26.0	3.0
KPC105□3CD5B7□□□□	1.00	45	45	30	27.0	11.5	1100	1100	26.0	3.0
KPC125□3CD5B7□□□□	1.20	45	45	30	27.0	11.5	1000	1200	26.0	2.5
KPC155□3CD5B7□□□□	1.50	45	45	30	27.0	11.5	1000	1500	26.0	2.5
KPC175□3CE3C7□□□□	1.75	54	50	30	27.0	11.5	700	1225	28.0	2.5
KPC205□3CE3C7□□□□	2.00	54	50	30	27.0	11.5	700	1400	28.2	2.5
KPC225□3CE3C7□□□□	2.20	54	50	40	27.0	11.5	600	1320	28.5	2.4
KPC255□3CE3C7□□□□	2.50	54	50	40	27.0	11.5	600	1500	29.0	2.2
KPC355□3CE3C7□□□□	3.00	54	50	40	27.0	11.5	600	1800	30.0	2.0

WORKING VOLTAGE 2000VDC (750VAC AT 50 Hz)										
Part number	CAP	Dimensions					Dv/Dt V/μ sec	1 Peak Amps	1rmsat 100KHz &55℃	ESR Max at100kHz mΩ
		W	H	T	P	Ymin				
KPC104□4DD1B5□□□□	0.1	41.5	29	17	25.5	8.5	1300	130	13.2	8.4
KPC154□4DD5B7□□□□	0.15	45	30	28	27.0	11.5	1200	180	15.11	7.0
KPC224□4DD5B7□□□□	0.22	45	30	28	27.0	11.5	1200	264	19.8	4.5
KPC274□4DD5B7□□□□	0.27	45	30	28	27.0	11.5	1200	324	21.7	4.3
KPC334□4DD5B7□□□□	0.33	45	45	30	27.0	11.5	1200	396	22.2	4.1
KPC394□4DD5B7□□□□	0.39	45	45	30	27.0	11.5	1200	468	22.5	4.0
KPC474□4DD5B7□□□□	0.47	45	45	30	27.0	11.5	1200	564	22.5	4.0
KPC564□4DE4D7□□□□	0.56	54	50	30	27.0	11.5	1000	560	22.7	3.8
KPC334□4DE4D7□□□□	0.68	54	50	30	27.0	11.5	1000	680	22.8	3.7
KPC394□4DE4D7□□□□	0.75	54	50	40	27.0	11.5	800	600	23.2	3.4
KPC394□4DE4D7□□□□	0.82	54	50	40	27.0	11.5	800	656	23.2	3.3
KPC394□4DE4D7□□□□	1.00	54	50	40	27.0	11.5	800	800	23.2	3.2