

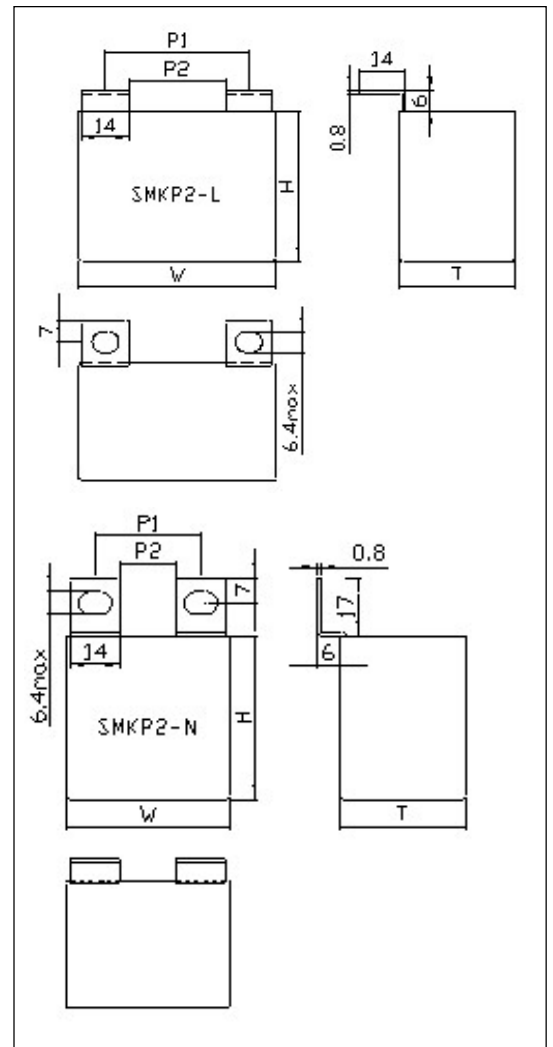
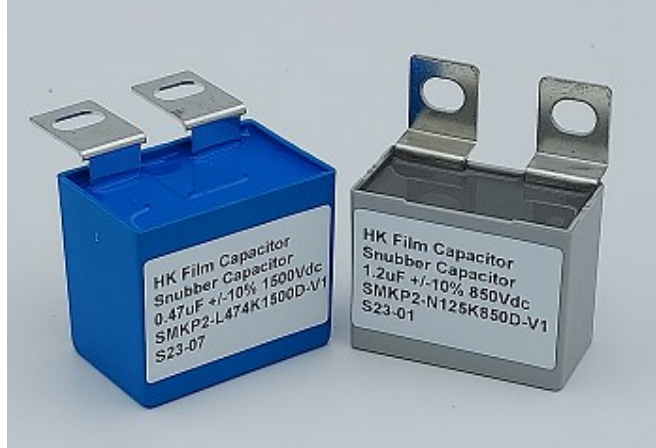
9. Snubber Capacitors – IGBT SMKP2-x series (x is referring “L” and “N”)

Applications :

For protection against voltage and current transients in IGBT modules and applications where high dv/dt is encountered

Construction :

- Low inductance construction
- Flame retardant plastic case and Epoxy Resin UL94-V0
- High Current carrying capacity Tinned Terminals for direct mounting the capacitor to IGBT module
- other Terminals also available



Electrical Characteristics :

Capacitance : 0.1uF - 3uF at 1kHz +25C
 Capacitance Tolerance : +/-5%(J), +/-10% (K)

Rated Voltage Ur	1000Vdc	1200Vdc	1600Vdc	2000Vdc
	500Vac	550Vac	600Vac	630Vac

Test Voltage : between Terminals :1.5xUr Vdc 10s +23C
 Terminals to Case: 3kVac 60s at +23C

Ripple RMS Current : up to 25A

Rated Temperature : +70C / +85C

Service Life : 30,000 hours at rated Vac 70C
 60,000 hours at rated Vdc 70C

Accelerated Life : 1.25 x rated Vac at 70C for 2,000 hours

Equivalent Series Resistance ESR : see item table

Equivalent Series Inductance ESL : < 22nH

Insulation Resistance : 100Vdc +23C >= 50,000Mohm

Specifications and Size :

SMKP2-x 1000Vdc / 500Vac

(x is referring the configuration)

P/N :	Cn uF	Dimension mm			dv/dt v/us	Peak Current I _{p-p} A	ESR (mohm) 100KHz	Max. Amp at 70C	Pitch, P1
		W	H	T					
SMKP2-x564K500A	0.56	47.5	31	17	450	252	10	10	23 ~ 28
SMKP2-x684K500A	0.68	47.5	31	20	450	306	9	11	23 ~ 28
SMKP2-x105K500A	1	47.5	35	23	450	450	8	13	23 ~ 28
SMKP2-x125K500A	1.2	47.5	40	28	450	540	7	14	23 ~ 28
SMKP2-x155K500A	1.5	47.5	40	28	450	675	6.5	16.5	23 ~ 28
SMKP2-x225K500A	2.2	47.5	48	33	450	990	5.7	17	23 ~ 28
SMKP2-x255K500A	2.5	47.5	49.5	40	450	1125	5.2	19	23 ~ 28
SMKP2-x305K500A	3	47.5	49.5	40	450	1350	4.5	24	23 ~ 28

SMKP2-x 1200Vdc / 550Vac

(x is referring the configuration)

P/N :	Cn uF	Dimension mm			dv/dt v/us	Peak Current I _{p-p} A	ESR (mohm) 100KHz	Max. Amp at 70C	Pitch, P1
		W	H	T					
SMKP2-x474K550A	0.47	47.5	33	20	500	235	6	9	23 ~ 28
SMKP2-x684K550A	0.68	47.5	37	24	500	340	5	13	23 ~ 28
SMKP2-x105K550A	1	47.5	45	30	500	500	4.5	15	23 ~ 28
SMKP2-x125K550A	1.2	47.5	45	30	500	600	4.5	16.5	23 ~ 28
SMKP2-x155K550A	1.5	47.5	48	33	500	750	4.5	20	23 ~ 28
SMKP2-x205K550A	2	47.5	49.5	40	500	1000	4	19	23 ~ 28
SMKP2-x225K550A	2.2	57.5	50	35	350	770	4.5	19	28 ~ 37
SMKP2-x275K550A	2.7	57.5	57.5	38	350	945	4	22	28 ~ 37

SMKP2-x 1600Vdc / 600Vac

(x is referring the configuration)

P/N : IS	Cn uF	Dimension mm			dv/dt v/us	Peak Current I _{p-p} A	ESR (mohm) 100KHz	Max. Amp at 70C	Pitch, P1
		W	H	T					
SMKP2-x224K600A	0.22	47.5	31	17	600	132	10	8	23 ~ 28
SMKP2-x334K600A	0.33	47.5	33	20	600	198	9	11	23 ~ 28
SMKP2-x474K600A	0.47	47.5	37	24	600	282	8	13	23 ~ 28
SMKP2-x684K600A	0.68	47.5	45	30	600	408	7.5	14.5	23 ~ 28
SMKP2-x105K600A	1	47.5	48	33	600	600	7	16	23 ~ 28
SMKP2-x125K600A	1.2	57.5	50	35	400	480	6	18	28 ~ 37
SMKP2-x155K600A	1.5	57.5	50	35	400	600	5	20	28 ~ 37

SMKP2-x 2000Vdc / 630Vac

(x is referring the configuration)

P/N :	Cn uF	Dimension mm			dv/dt v/us	Peak Current I _{p-p} A	ESR (mohm) 100KHz	Max. Amp at 70C	Pitch, P1
		W	H	T					
SMKP2-x104K630A	0.1	47.5	31	17	700	70	10	6	23 ~ 28
SMKP2-x154K630A	0.15	47.5	31	17	700	105	9	8	23 ~ 28
SMKP2-x224K630A	0.22	47.5	33	20	700	154	8.3	10	23 ~ 28
SMKP2-x334K630A	0.33	47.5	37	24	700	231	7.5	12	23 ~ 28
SMKP2-x474K630A	0.47	47.5	45	30	700	329	6.5	14	23 ~ 28
SMKP2-x684K630A	0.68	47.5	48	33	700	470	6	15	23 ~ 28
SMKP2-x105K630A	1	57.5	50	35	500	500	5.5	16	28 ~ 37
SMKP2-x125K630A	1.2	57.5	57.5	38	500	600	5	18	28 ~ 37

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