

IGBT Snubber Protection Capacitor C34



Characteristics

- Plastic shell, Sealed with epoxy resin
- Tinned plated copper wire extraction
- Resistance to high voltage, low dissipation factor
- Low ESL, low ESR, low temperature rise
- High pulse current, High dv/dt affordability

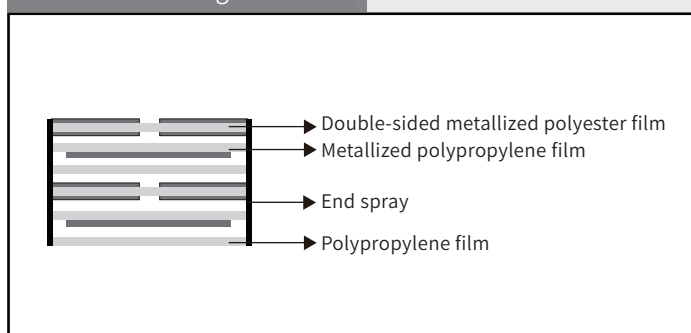
Application

- IGBT Snubber circuit; IGBT Snubber equipment
- Widely used in power electronic equipment UPS, inverter, induction heater, welding machine for protect and absorb peak current and peak voltage.

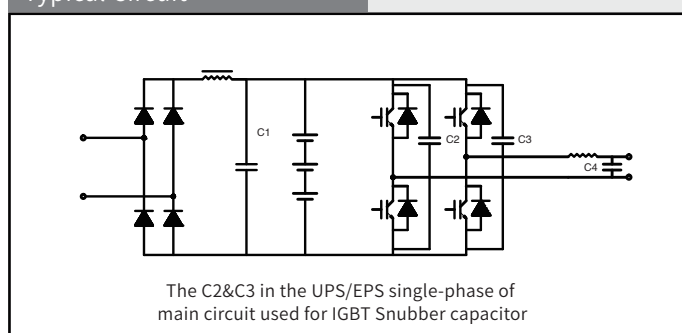
Technical Data

• Reference standard	IEC61071 .GB/T17702
• Operating temperature range	-40°C~85°C Tmax +105°C
• Capacitance range	0.0068µF -5.6µF
• Rated voltage	700 VDC -3000VDC
• Capacitance tolerance	±5%(J); ±10%(K)
• Withstand voltage	1.5Un Dc/10S at 20°C
• Dissipation factor	$tg\delta \leq 0.0005$ $C \leq 1\mu F$ $f=10KHz$ at 20°C
	$Tg\delta \leq 0.0010$ $C \geq 1\mu F$ $f=10KHz$ at 20°C
• Insulation resistance	$C \leq 0.33\mu F$ $R_s \geq 30000M\Omega$ (at 20°C 100VDC 60S)
	$C > 0.33\mu F$ $R_s C \geq 10000S$ (at 20°C 100VDC 60S)
• Flame Retardation	UL94V-0
• Life Expectancy	100000hrs (U_n $\theta_{hotspot} \leq 85^\circ C$)

Construction Diagram



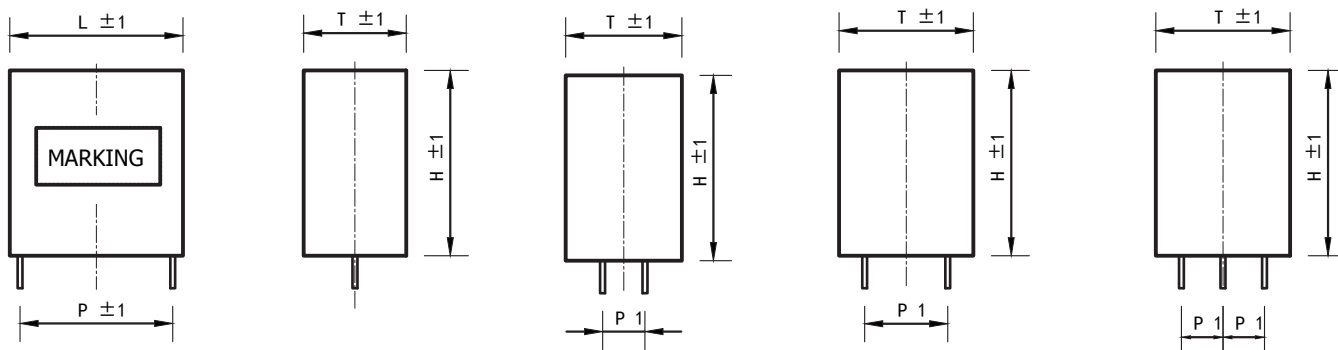
Typical Circuit



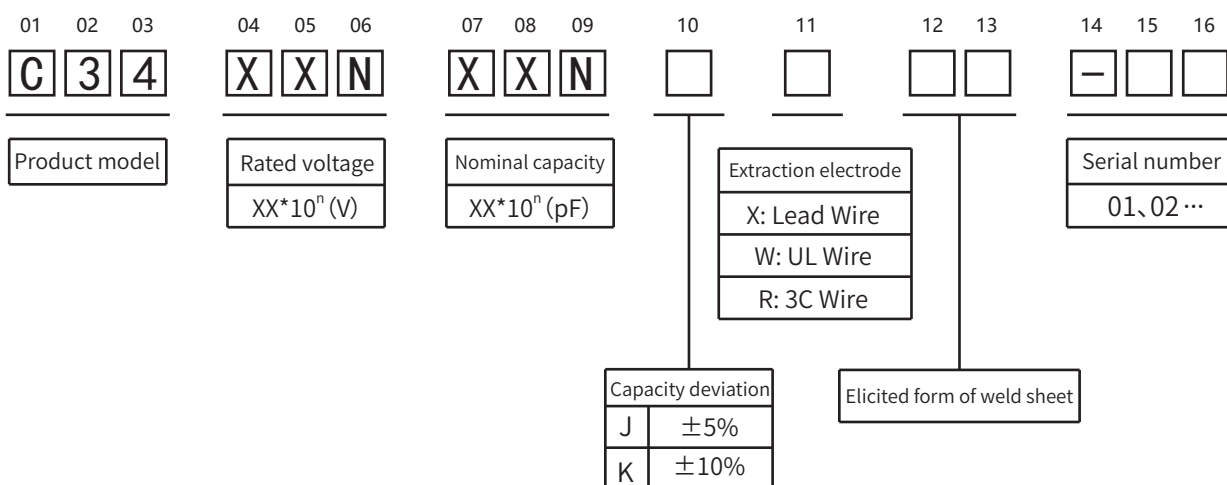
C34

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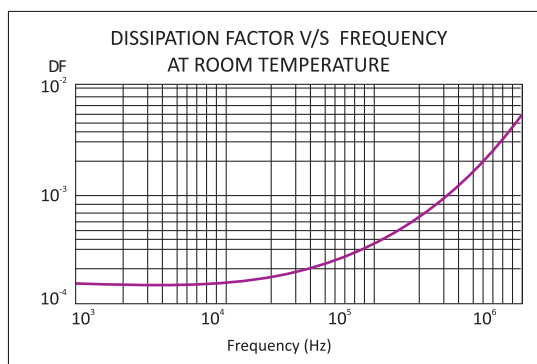
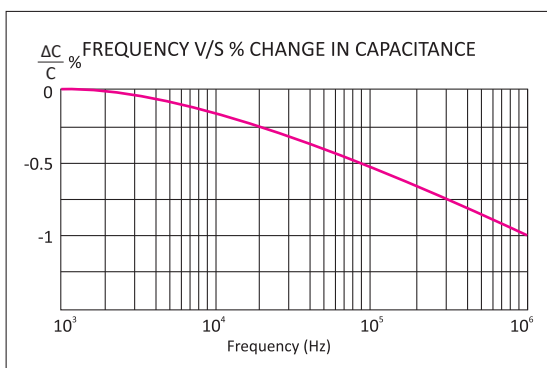
Product Shape



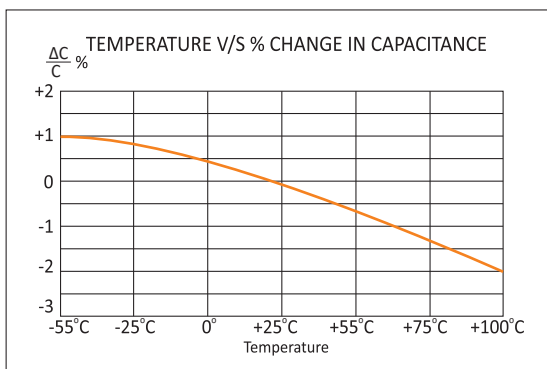
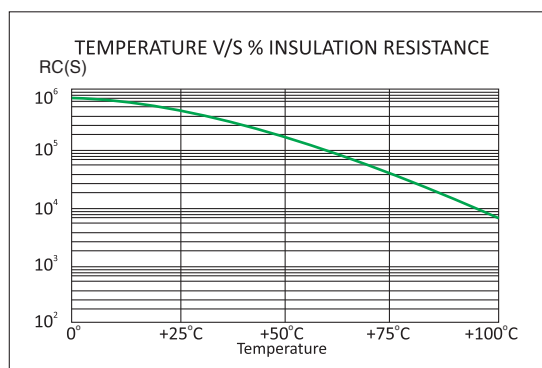
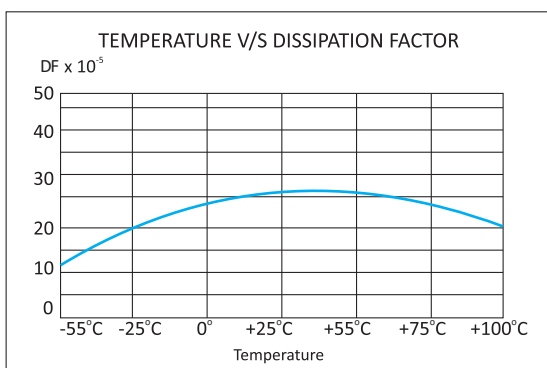
Product Coding



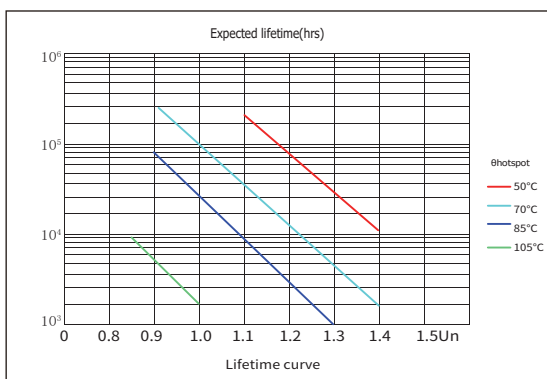
Temperature Characteristics



Frequency Characteristics



Life Expectancy



C34

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Article Table

Part Number	CAP μF	Dimension (mm)						dv/dt (V/μs)	Ipeak (A)	Irms @100KHz70℃ (A)	ESL (nH)	ESR @100KHz20℃ (mΩ)
		L	T	H	P	P1	d					
U _N 700VDC Urms 380VAC Upk 1000VDC												
C34701104JX08•••	0.1	26.5	8.5	17.0	22.5		0.8	350	35.0	3.5	28	24
C34701154JX08•••	0.15	26.5	10.0	18.5	22.5		0.8	350	52.5	5.0	25	20
C34701224JX08•••	0.22	26.5	11.0	20.0	22.5		0.8	330	72.6	6.5	20	15
C34701224JX10•••	0.22	31.0	11.0	20.0	27.5		1.0	300	66.0	6.5	24	16
C34701334JX10•••	0.33	31.0	13.0	22.0	27.5		1.0	300	99.0	8.5	22	14
C34701474JX10•••	0.47	31.0	15.0	24.5	27.5		1.0	280	131.6	9.0	21	12
C34701684JX12•••	0.68	31.0	17.0	28.0	27.5		1.2	280	190.4	12.0	20	11
C34701105JX12•••	1.0	31.0	22.0	31.0	27.5	10.2	1.2	280	280	13.5	19	7.0
C34701105JX12•••	1.0	42.5	17.0	28.0	37.5		1.2	250	250	12.5	30	7.5
C34701155JX12•••	1.5	42.5	22.0	30.0	37.5	10.2	1.2	250	375	16.0	28	7.0
C34701205JX12•••	2.0	42.5	28.0	37.0	37.5	20.3	1.2	220	440	18.0	25	6.0
C34701225JX12•••	2.2	42.5	28.0	37.0	37.5	20.3	1.2	220	484	18.5	25	6.0
C34701305JX12•••	3.0	42.5	30.0	45.0	37.5	10.2	1.2	200	600	21.0	23	5.0
C34701335JX12•••	3.3	42.5	30.0	45.0	37.5	10.2	1.2	200	660	21.5	22	5.0
C34701405JX12•••	4.0	42.5	33.0	45.0	37.5	10.2	1.2	180	720	23.0	20	4.0
C34701405JX12•••	4.0	57.5	30.0	45.0	52.5	10.2	1.2	180	720	22.0	33	4.5
C34701475JX12•••	4.7	57.5	30.0	45.0	52.5	10.2	1.2	150	705	23.5	32	3.8
C34701565JX12•••	5.6	57.5	35.0	50.0	52.5	10.2	1.2	150	840	25.0	32	3.5
U _N 1000VDC Urms 450VAC Upk 1400VDC												
C34102683JX08•••	0.068	26.5	8.5	17.0	22.5		0.8	1300	88.4	3.2	16	25
C34102104JX08•••	0.1	26.5	11.0	20.0	22.5		0.8	1300	130	4.5	17	23.0
C34102154JX08•••	0.15	26.5	12.0	22.0	22.5		0.8	1300	195	6.0	18	19.0
C34102154JX08•••	0.15	31.0	11.0	20.0	27.5		0.8	1200	180	5.5	20	20.0
C34102224JX10•••	0.22	31.0	15.0	24.5	27.5		1.0	1200	264	7.0	20	15.0
C34102334JX10•••	0.33	31.0	17.0	28.0	27.5		1.0	1100	363	8.5	21	13.0
C34102474JX12•••	0.47	31.0	18.0	33.0	27.5		1.2	1000	470	10.5	22	9.5
C34102474JX12•••	0.47	42.5	17.0	28.0	37.5		1.2	950	446.5	9.0	24	10.0
C34102684JX12•••	0.68	42.5	22.0	30.0	37.5	10.2	1.2	900	612	12.0	25	6.0
C34102105JX12•••	1.0	42.5	28.0	37.0	37.5	20.3	1.2	850	850	15.5	27	5.6
C34102155JX12•••	1.5	42.5	30.0	45.0	37.5	10.2	1.2	850	1275	18.0	29	5.0
C34102205JX12•••	2.0	42.5	33.0	45.0	37.5	10.2	1.2	750	1500	20.0	30	4.5
C34102205JX12•••	2.0	57.5	30.0	45.0	52.5	10.2	1.2	600	1200	18.5	32	4.8
C34102225JX12•••	2.2	57.5	30.0	45.0	52.5	10.2	1.2	550	1210	19.0	32	4.2
C34102305JX12•••	3.0	57.5	35.0	50.0	52.5	10.2	1.2	500	1500	22.0	34	3.5
C34102335JX12•••	3.3	57.5	35.0	50.0	52.5	10.2	1.2	500	1650	22.5	36	3.2

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C34

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Article Table

Part Number	CAP μF	Dimension (mm)						dv/dt (V/μs)	Ipeak (A)	Irms @100KHz70°C (A)	ESL (nH)	ESR @100KHz20°C (mΩ)
		L	T	H	P	P1	d					
U _N 1200VDC Urms 500VAC Upk 1600VDC												
C34122473JX08•••	0.047	26.5	8.5	17.0	22.5		0.8	1500	70.5	3.5	15	27
C34122683JX08•••	0.068	26.5	10.0	18.5	22.5		0.8	1500	102	4.0	16	23
C34122683JX08•••	0.068	31.0	9.0	18.0	27.5		0.8	1300	88.4	4.0	18	25
C34122104JX08•••	0.1	26.5	12.0	22.0	22.5		0.8	1400	140	5.0	17	19
C34122104JX08•••	0.1	31.0	11.0	20.0	27.5		0.8	1200	120	5.0	19	20
C34122154JX10•••	0.15	31.0	13.0	22.0	27.5		1.0	1200	180	6.5	20	18
C34122224JX10•••	0.22	31.0	15.0	24.5	27.5		1.0	1200	264	7.0	22	15
C34122334JX12•••	0.33	31.0	18.0	33.0	27.5		1.2	1200	396	8.5	23	11
C34122334JX12•••	0.33	42.5	15.0	26.0	37.5		1.2	1100	363	8.0	25	12
C34122474JX12•••	0.47	42.5	17.0	28.0	37.5		1.2	1100	517	9.5	26	9.0
C34122684JX12•••	0.68	42.5	22.0	30.0	37.5	10.2	1.2	1100	748	12.5	27	6.0
C34122105JX12•••	1.0	42.5	28.0	37.0	37.5	20.3	1.2	1000	1000	16.0	28	5.5
C34122155JX12•••	1.5	42.5	30.0	45.0	37.5	10.2	1.2	800	1200	18.5	30	5.0
C34122205JX12•••	2.0	57.5	30.0	45.0	52.5	10.2	1.2	750	1500	19.0	32	4.8
C34122225JX12•••	2.2	57.5	30.0	50.0	52.5	10.2	1.2	750	1650	20.0	35	4.2
C34122305JX12•••	3.0	57.5	35.0	50.0	52.5	10.2	1.2	600	1800	22.0	37	3.5
U _N 1600VDC Urms 500VAC Upk 2000VDC												
C34162333JX08•••	0.033	26.5	8.5	17.0	22.5		0.8	1800	59.4	3.0	20	25.0
C34162473JX08•••	0.047	26.5	10.0	18.5	22.5		0.8	1600	75.2	4.0	20	22.0
C34162473JX08•••	0.047	31.0	9.0	18.0	27.5		0.8	1500	70.5	3.5	25	25.0
C34162683JX08•••	0.068	26.5	12.0	22.0	22.5		0.8	1600	108.8	5.0	20	20.0
C34162683JX08•••	0.068	31.0	11.0	20.0	27.5		0.8	1500	102	4.5	25	22.0
C34162104JX08•••	0.1	31.0	13.0	22.0	27.5		0.8	1300	130	6.5	25	18.0
C34162154JX10•••	0.15	31.0	17.0	28.0	27.5		1.0	1200	180	8.0	24	16.0
C34162224JX12•••	0.22	31.0	18.0	33.0	27.5		1.2	1200	264	9.5	24	13.5
C34162224JX12•••	0.22	42.5	17.0	28.0	37.5		1.2	1100	242	9.0	32	15.0
C34162334JX12•••	0.33	42.5	22.0	30.0	37.5	10.2	1.2	1100	363	11.0	29	12.0
C34162474JX12•••	0.47	42.5	28.0	37.0	37.5	20.3	1.2	1000	470	12.5	28	9.0
C34162684JX12•••	0.68	42.5	28.0	37.0	37.5	20.3	1.2	1000	680	14.5	27	8.0
C34162105JX12•••	1.0	42.5	30.0	45.0	37.5	10.2	1.2	900	900	17.5	26	5.6
C34162125JX12•••	1.2	57.5	30.0	45.0	52.5	10.2	1.2	800	960	18.5	35	5.5
C34162155JX12•••	1.5	57.5	35.0	50.0	52.5	10.2	1.2	750	1125	20.0	38	4.8

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C34

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Article Table

Part Number	CAP μF	Dimension (mm)						dv/dt (V/μs)	Ipeak (A)	Irms @100KHz70°C (A)	ESL (nH)	ESR @100KHz20°C (mΩ)
		L	T	H	P	P1	d					
U _N 2000VDC U _{rms} 630VAC U _{pk} 2500VDC												
C34202223JX08•••	0.022	26.5	8.5	17.0	22.5		0.8	1800	39.6	3.5	24	35
C34202333JX08•••	0.033	26.5	11.0	20.0	22.5		0.8	1800	59.4	4.5	24	32
C34202333JX08•••	0.033	31.0	11.0	20.0	27.5		0.8	1500	49.5	4.0	25	34
C34202473JX08•••	0.047	26.5	12.0	22.0	22.5		0.8	1800	84.6	6.0	24	27
C34202473JX08•••	0.047	31.0	11.0	20.0	27.5		0.8	1500	70.5	5.5	24	29
C34202683JX08•••	0.068	31.0	13.0	22.0	27.5		0.8	1500	102	6.9	23	25
C34202104JX10•••	0.1	31.0	15.0	24.5	27.5		1.0	1500	150	8.2	22	18
C34202154JX10•••	0.15	31.0	18.0	33.0	27.5		1.0	1500	225	9.0	28	14
C34202154JX12•••	0.15	42.5	15.0	26.0	37.5		1.2	1200	180	8.5	31	16
C34202224JX12•••	0.22	42.5	22.0	30.0	37.5	10.2	1.2	1100	242	10.5	31	15
C34202334JX12•••	0.33	42.5	28.0	37.0	37.5	20.3	1.2	1100	363	11.5	30	12
C34202474JX12•••	0.47	42.5	28.0	37.0	37.5	20.3	1.2	1100	517	13.0	29	10
C34202684JX12•••	0.68	42.5	33.0	45.0	37.5	10.2	1.2	1100	748	16.5	25	7.5
C34202684JX12•••	0.68	57.5	30.0	45.0	52.5	10.2	1.2	1000	680	15.5	27	8.0
C34202105JX12•••	1.0	57.5	35.0	50.0	52.5	10.2	1.2	950	950	18.5	31	6.0
U _N 3000VDC U _{rms} 700VAC U _{pk} 3500VDC												
C34302682JX08•••	0.0068	26.5	8.5	17.0	22.5		0.8	3000	20.4	2.3	18	33
C34302103JX08•••	0.01	26.5	8.5	17.0	22.5		0.8	3000	30.0	3.2	18	25
C34302103JX08•••	0.01	31.0	9.0	18.0	27.5		0.8	3000	30.0	3.0	18	27
C34302223JX08•••	0.022	26.5	12.0	22.0	22.5		0.8	2800	61.6	6.0	18	22
C34302223JX08•••	0.022	31.0	11.0	20.0	27.5		0.8	2500	55.0	5.5	19	24
C34302333JX08•••	0.033	31.0	15.0	24.5	27.5		0.8	2500	82.5	7.0	19	22
C34302473JX08•••	0.047	31.0	18.0	33.0	27.5		0.8	2000	94.0	8.5	20	20
C34302104JX12•••	0.1	42.5	22.0	33.0	37.5	10.2	1.2	1500	150	12.4	20	16
C34302224JX12•••	0.22	42.5	30.0	45.0	37.5	10.2	1.2	1200	264	14.5	22	15
C34302334JX12•••	0.33	42.5	33.0	45.0	37.5	10.2	1.2	1200	396	16.0	23	11.5
C34302474JX12•••	0.47	57.5	33.0	50.0	52.5	10.2	1.2	1000	470	17.5	27	9.5

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