Resonant Capacitor
C44

Characteristics

- Plastic packaging , epoxy resin filling
- Lead by the tinned copper nut, small size and convenient installation.
- High frequency and high current endurance.
- Low ESL and ESR
- High pulse current, high dv/dt endurance and good stability.self healing

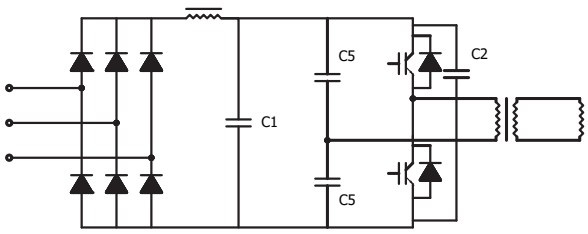
Application

- Widely used in series circuits or parallel resonant circuits of power electronic devices.
- Welding power supplies, induction heating equipment in resonance occasions.

Technical Data

• Reference Standard	IEC61071 .IEC60110
• Operating Temperature Range	-40°C~+85°C Tmax+105°C(highest temp. +105°C)
• Capacitance Range	1μF ~7.0μF
• Rated Voltage	1200VDC~2000VDC
• Capacitance Tolerance	±5%(J); ±10%(K)
• Withstand Voltage	1.5Un DC/10S
• Dissipation Ractor	tgδ≤0.0010 f=10KHz at 20°C
• Insulation Resistance	RsC≥5000S (at20°C 100VDC 60S)
• Flame Fetardation	UL94V-0
• Life Expectancy	100000hrs (Un θhotspot ≤ 70°C)

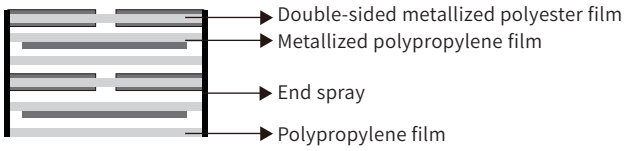
Typical Circuit

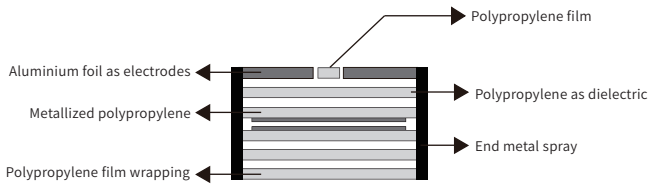


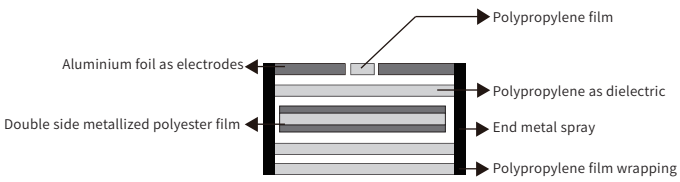
C5 is resonant capacitor in the resonant circuit.

C44 Resonant Capacitor

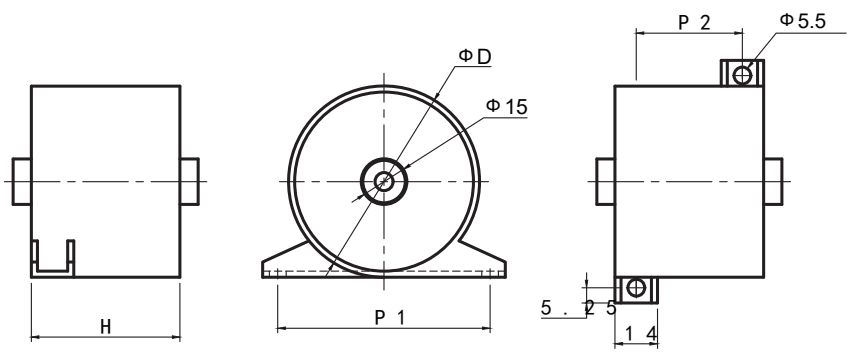
Construction Diagram







Product Shape



ΦD(mm)	H(mm)	P 1(mm)	P 2(mm)
5 0	6 0	4 6	5 8
6 3	5 0	3 6	7 0
7 6	5 0	3 6	8 2

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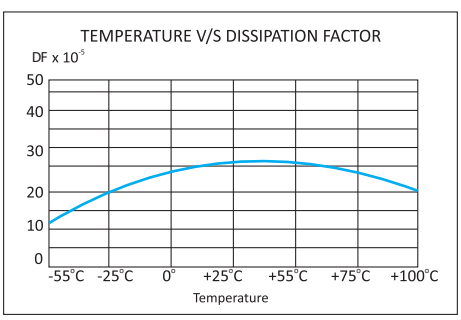
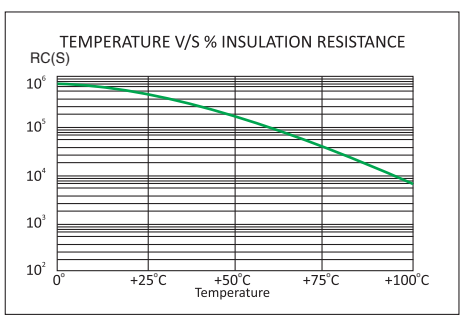
Product Coding

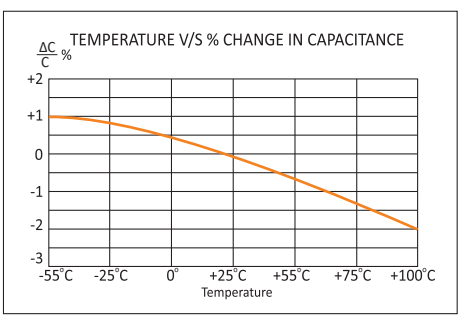
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
C	4	4	X	X	N	X	X	N						–		

- 01 02 03: Product model
- 04 05 06: Rated voltage — XX*10^n (V)
- 07 08 09: Nominal capacity — XX*10^n (pF)
- 10: Capacity deviation
  - J: ±5%
  - K: ±10%
- 11: Extraction electrode — F -Nut
- 12 13 14: Lead wire type
- 15 16 17: Serial number — 01、02…

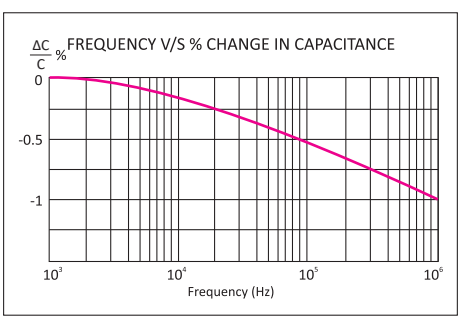
Frequency Characteristics

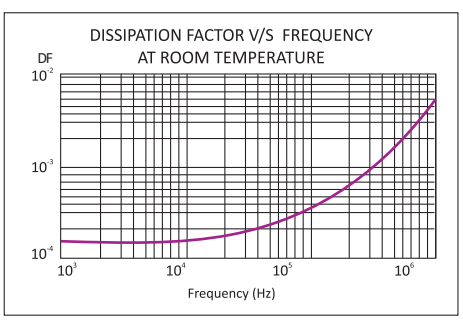




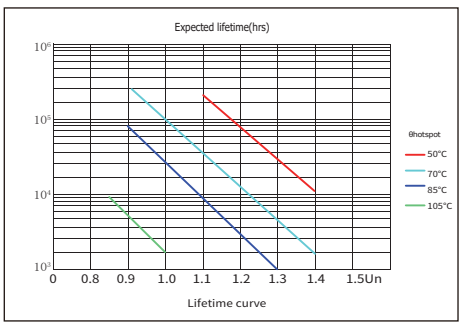


Temperature Characteristics





Life Expectancy



C44 Resonant Capacitor

Article Table

Part Number	CAP μF	Dimension（mm） L	Dimension（mm） D	dv/dt (V/μs)	Ipeak (A)	Irms @100KHz70℃ (A)	ESL (nH)	ESR @100KHz20℃ (mΩ)	Qn (kVar)
U_N 1200VDC Urms 500VAC Upeak 710VAC									
C46122105J••••	1.0	40	38	900	900	40	27	4.8	18.0
C46122155J••••	1.5	40	46	800	1200	50	25	3.2	22.5
C46122205J••••	2.0	40	53	750	1500	60	25	2.4	27.0
C46122205J••••	2.0	47	38	720	1440	55	28	2.4	24.7
C46122305J••••	3.0	40	64	680	2040	80	23	1.6	36.0
C46122305J••••	3.0	47	45	620	1860	75	27	2.1	33.7
C46122405J••••	4.0	47	52	550	2200	85	26	1.6	38.2
C46122505J••••	5.0	47	58	500	2500	90	25	1.3	40.5
C46122605J••••	6.0	47	63	450	2700	95	23	1.1	42.7
C46122705J••••	7.0	47	68	450	3150	100	22	0.9	45.0
C46122805J••••	8.0	47	73	400	3200	105	20	0.8	47.2
U_N 2000VDC Urms 750VAC Upeak 1060VAC									
C46202105J••••	1.0	40	41	1100	1100	45	27	4.0	30.3
C46202155J••••	1.5	40	50	1000	1500	55	26	2.7	37.1
C46202205J••••	2.0	40	58	900	1800	65	25	2.0	43.8
C46202205J••••	2.0	60	49	850	1700	55	26	2.0	37.1
C46202305J••••	3.0	40	70	750	2250	80	23	1.3	54.0
C46202305J••••	3.0	60	59	650	1950	70	25	1.9	47.2
C46202405J••••	4.0	40	81	600	2400	90	22	1.4	60.7
C46202405J••••	4.0	60	68	550	2200	75	23	1.4	50.6
C46202505J••••	5.0	60	76	500	2500	85	22	1.1	57.3
C46202605J••••	6.0	60	83	450	2700	90	21	0.9	60.7
U_N 3000VDC Urms 1200VAC Upeak 1700VAC									
C46302334J••••	0.33	44	43	1800	594	40	26	7.2	43.2
C46302474J••••	0.47	44	51	1700	799	48	25	5.5	51.8
C46302504J••••	0.5	44	53	1600	800	50	25	4.8	54.0
C46302684J••••	0.68	44	61	1500	1020	56	24	3.5	60.5
C46302754J••••	0.75	44	64	1400	1050	60	24	3.2	64.8
C46302804J••••	0.8	44	66	1350	1080	62	23	4.0	67.0
C46302105J••••	1.0	44	74	1300	1300	70	22	3.2	75.6
C46302125J••••	1.2	44	81	1250	1500	75	21	2.7	81.0
C46302155J••••	1.5	44	91	1200	1800	80	20	2.1	86.4
U_N 4000VDC Urms 1500VAC Upeak 2100VAC									
C46402803J••••	0.08	60	46	3000	240	35	28	10.0	47.2
C46402104J••••	0.1	60	51	2850	285	38	27	8.0	51.3
C46402124J••••	0.12	60	56	2750	330	42	26	6.6	56.7
C46402154J••••	0.15	60	63	2500	375	45	25	8.5	60.7
C46402184J••••	0.18	60	64	2400	432	50	25	7.1	67.5
C46402254J••••	0.25	60	80	2200	550	55	23	5.1	74.2
C46402334J••••	0.33	60	52	2000	660	45	23	3.9	60.7
C46402474J••••	0.47	60	62	1800	846	50	22	5.1	67.5
C46402504J••••	0.5	60	64	1700	850	52	22	4.8	70.2
C46402684J••••	0.68	60	75	1600	1088	55	20	3.5	74.2
C46402754J••••	0.75	60	78	1500	1125	58	20	3.2	78.3

The above table / graphics are for reference only, subject to the actual product (unit: mm)
Note：Maximum Irms current at 100kHz, Tamb=70°C △T≤15°C.