

C46

Resonant Capacitor

谐振电容器
C46



产品特点.Characteristics

- 迈拉胶带封装, 环氧树脂灌注;
 - 镀锡铜螺母、铜片引出;
 - 高频大电流承受能力强;
 - 自感(ESL)小, 等效串联电阻(ESR)小;
 - 高脉冲电流、高dv/dt 承受能力、高稳定、具有自愈性。
- PET tape wrapping, epoxy resin perfusion
 - Tin plated copper nut or copper sheet leads.
 - High-frequency current capacity
 - Low ESL, low ESR
 - High pulse current , high dV/dt, high stability, self healing

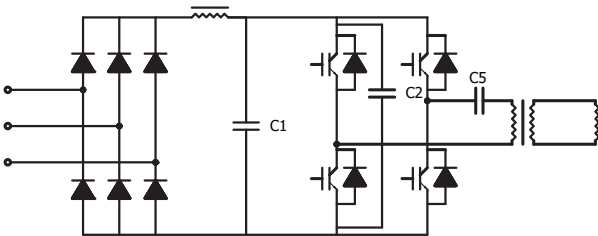
产品应用.Application

- 广泛应用于电力电子设备中的串/并联谐振电路
- 电焊机电源, 感应加热设备等谐振场合
- Widely used in series circuits or parallel resonant circuits of power electronic devices.
- Welding power supplies, induction heating equipment in resonance occasions.

性能参数.Technical Data

● 引用标准Reference Standard	IEC61071 .GB/T17702
● 工作温度范围Operating Temperature Range	-40℃~+70℃ (Max. +85℃) Tmax +85℃
● 容量范围Capacitance Range	0.06μF ~8.0μF
● 额定电压Rated Voltage	1200VDC~4000VDC
● 容量偏差Capacitance Tolerance	±5%(J); ±10%(K)
● 耐电压Withstand Voltage	1.5Un DC/10S
● 损耗角正切Dissipation Ractor	$tg\delta\leq0.0005\ C\leq1\mu F\ f=10KHz\ at\ 20^{\circ}C$
	$tg\delta\leq0.0010\ C\geq1\mu F\ f=10KHz\ at\ 20^{\circ}C$
● 绝缘电阻Insulation Resistance	$C\leq0.33\mu F\ R_s\geq15000M\Omega(at20^{\circ}C\ 100VDC\ 60S)$
	$C>0.33\ \mu F\ R_sC\geq5000S\ (at20^{\circ}C\ 100VDC\ 60S)$
● 阻燃性Flame Fetardation	UL94V-0
● 预期寿命Life Expectancy	100000hrs (Un θ hotspot ≤ 70℃)

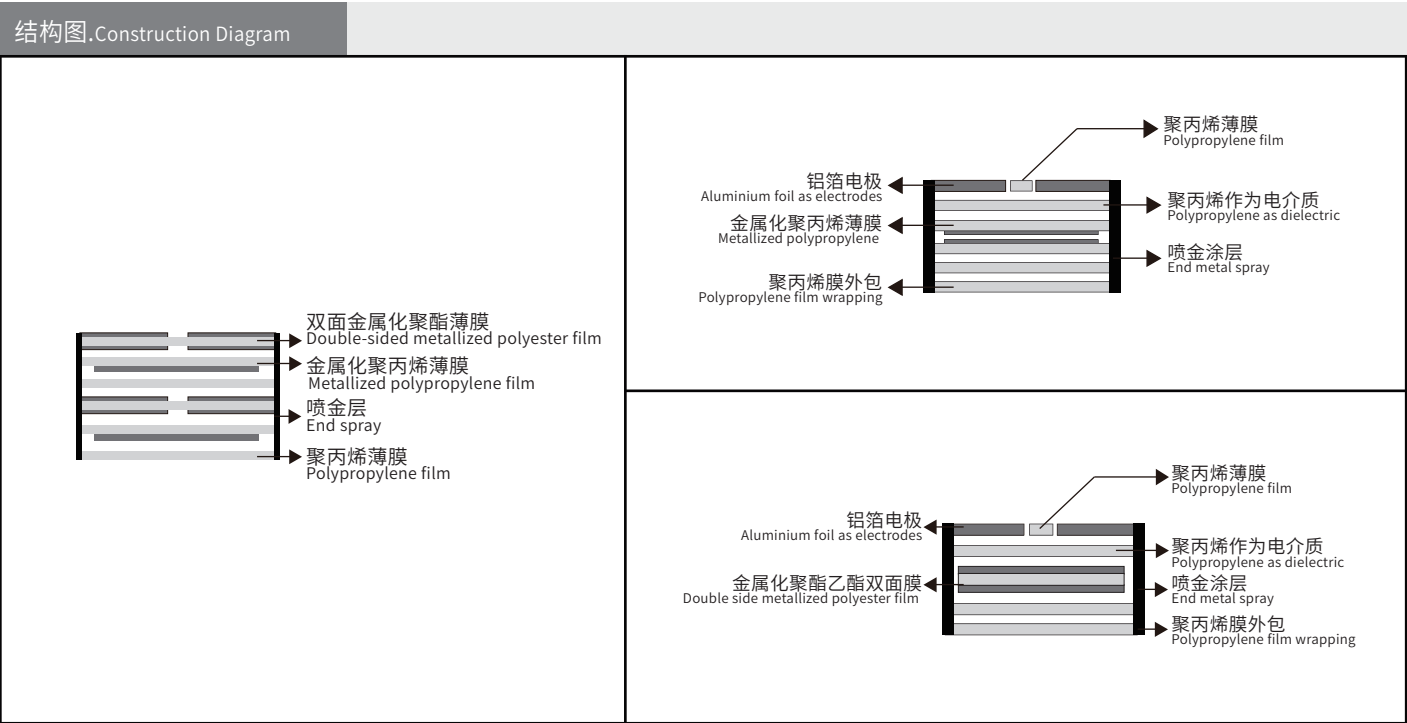
典型线路图.Typical Circuit



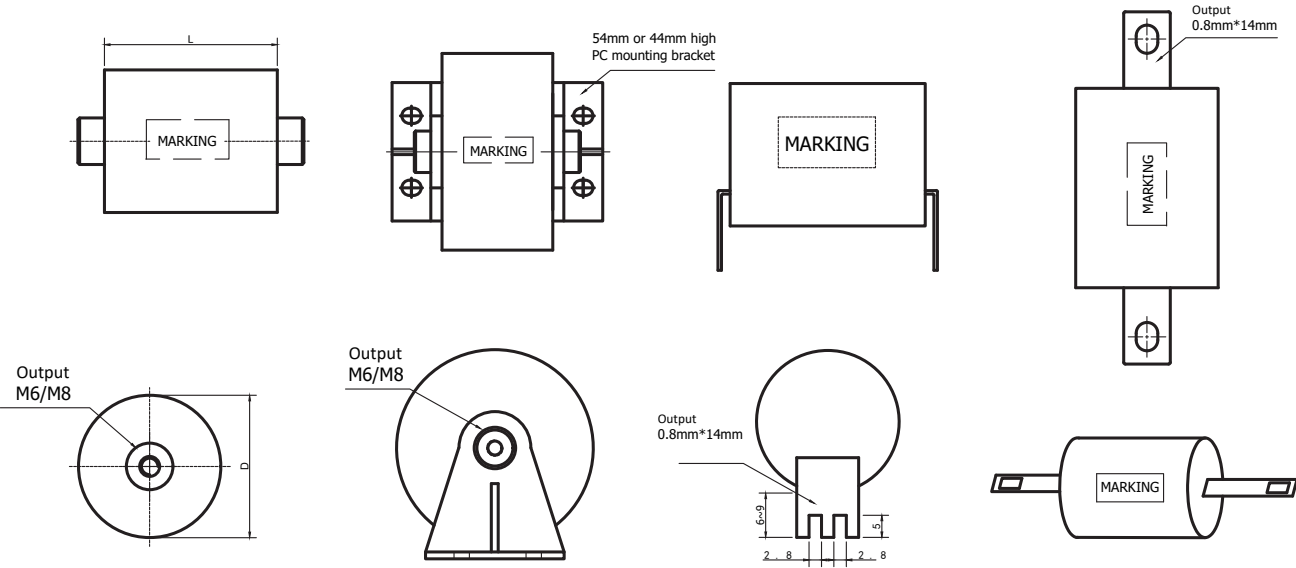
串联谐振电路, C5为谐振电容器
Resonant Circuit, C5 is the Resonant Capacitor.

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Resonant Capacitor



产品外形.Product Shape



C46

Resonant Capacitor

产品编码.Product Coding

010203

C46

产品型号
Product model

040506

XXN

额定电压
Rated voltage
XX*10ⁿ (V)

070809

XXN

标称容量
Nominal capacity
XX*10ⁿ (pF)

10

容量偏差
Capacity deviation
J ±5%
K ±10%

11

引出电极
Extraction electrode
P-焊片
P - Soldering lug
F-螺母
F - Nut

1213

容量偏差
Capacity deviation
J ±5%
K ±10%

1415

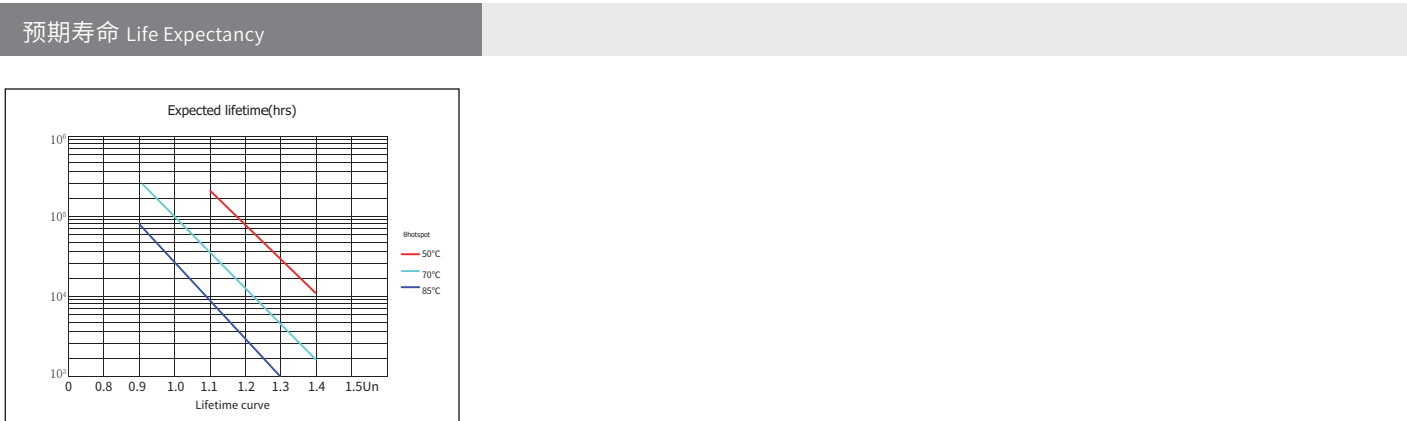
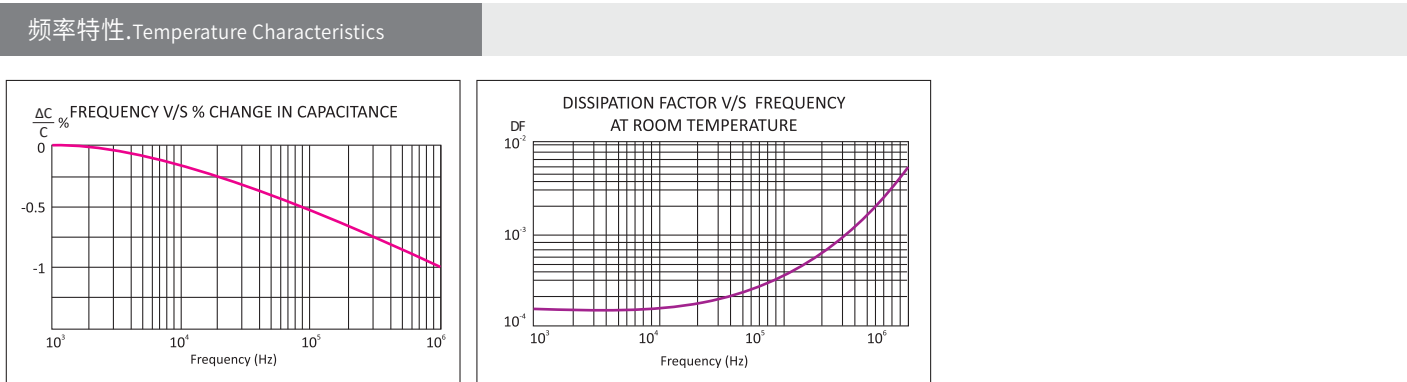
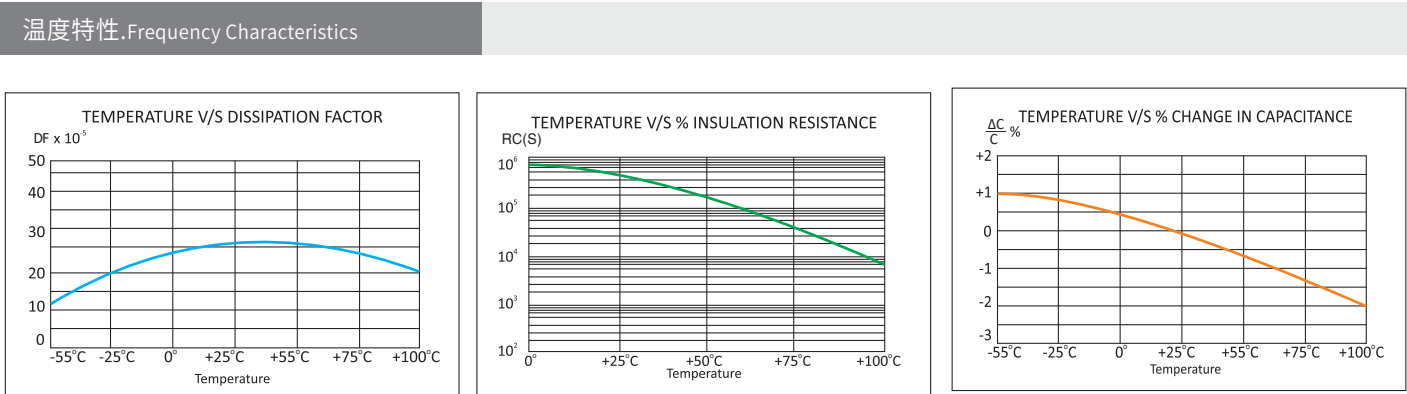
引出形式
Leads form
G01、H01、I01、J01、K01、W01

161718

-

引线型号
Lead wire type
引线为焊片时, 空缺此栏
Leads are soldering lugs, the column is vacant

序列号
Serial number
01、02...



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参数表,Article Table

Part Number	CAP μF	Dimension (mm)		dv/dt (V/μs)	Ipeak (A)	Irms @100KHz70℃ (A)	ESL (nH)	ESR @100KHz20℃ (mΩ)	Qn (kVar)
		L	D						
UN 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
UN 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
UN 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
UN 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

以上表格/图形仅供参考,以实物为准,(单位:mm)
The above table / graphics are for reference only, subject to the actual product (unit: mm)
备注:最大电流Irms为f=100kHz,Tamb=70℃ △T≤15℃的值。
Note:Maximum Irms current at 100kHz, Tamb=70℃ △T≤15℃.