

Resonant Capacitor C47



Characteristics

- Polypropylene dielectric
- Aluminum case, dry resin perfusion
- Tin plated copper nut lead out, easy installation
- High frequency high current bearing capacity
- Low ESL, low ESR, high pulse current, high dv/dt, high stability, self healing

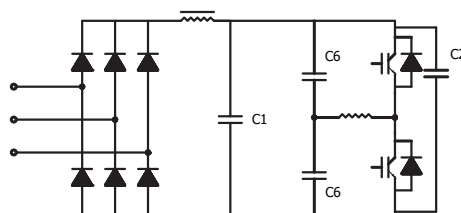
Application

- Widely used in half-bridge, full bridge resonant circuits of commercial induction cookers and induction heaters
- Welding machine power supplies, induction heating equipment in resonant occasions.

Technical Data

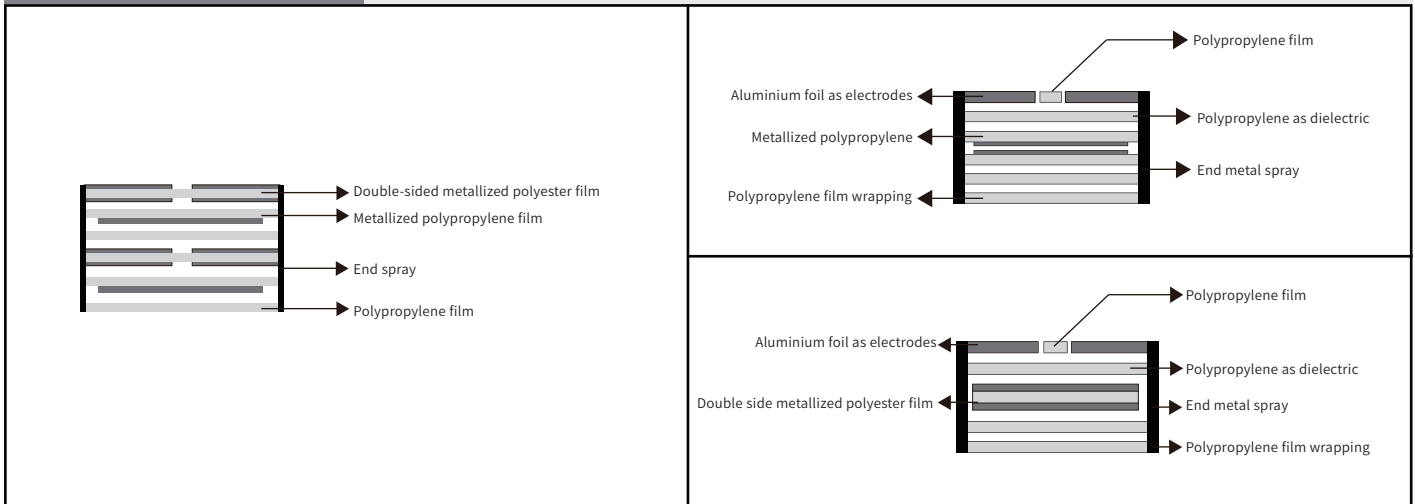
• Reference Standard	IEC61071 .IEC60110
• Operating Temperature Range	-40°C~+85°C Tmax+105°C(highest temp. +105°C)
• Capacitance Range	1μF ~7.0μF
• Rated Voltage	1200VDC~2000VDC
• Capacitance Tolerance	±5%(J); ±10%(K)
• Withstand Voltage	1.5Un DC/10S
• Dissipation Factor	tgδ≤0.0010 f=10KHz at 20°C
•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

Typical Circuit

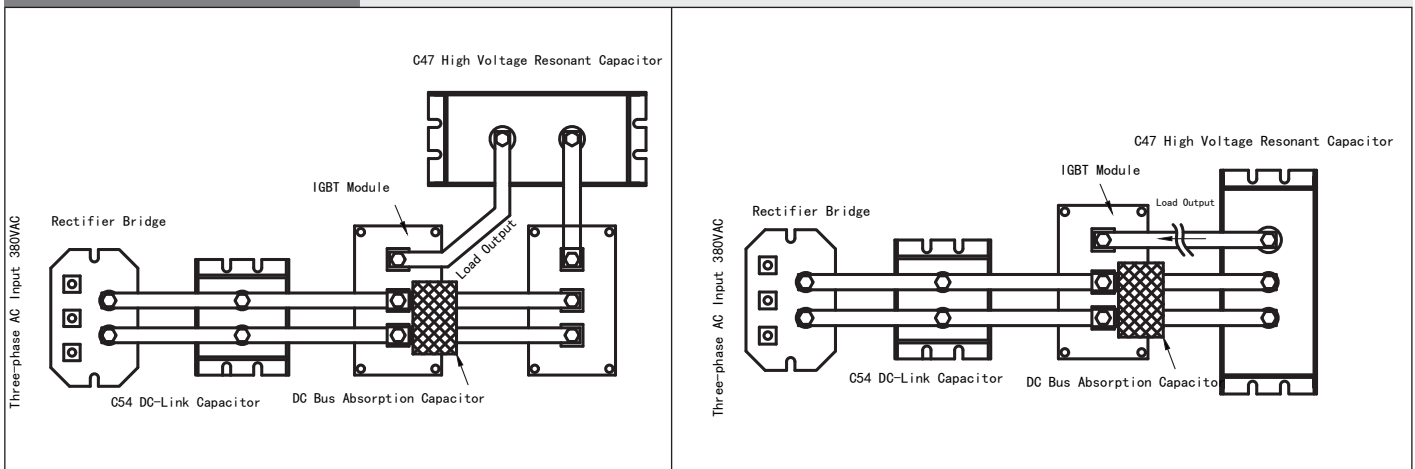


串联谐振电路, C6为谐振电容器
Resonant circuit, C6 are the resonant capacitors

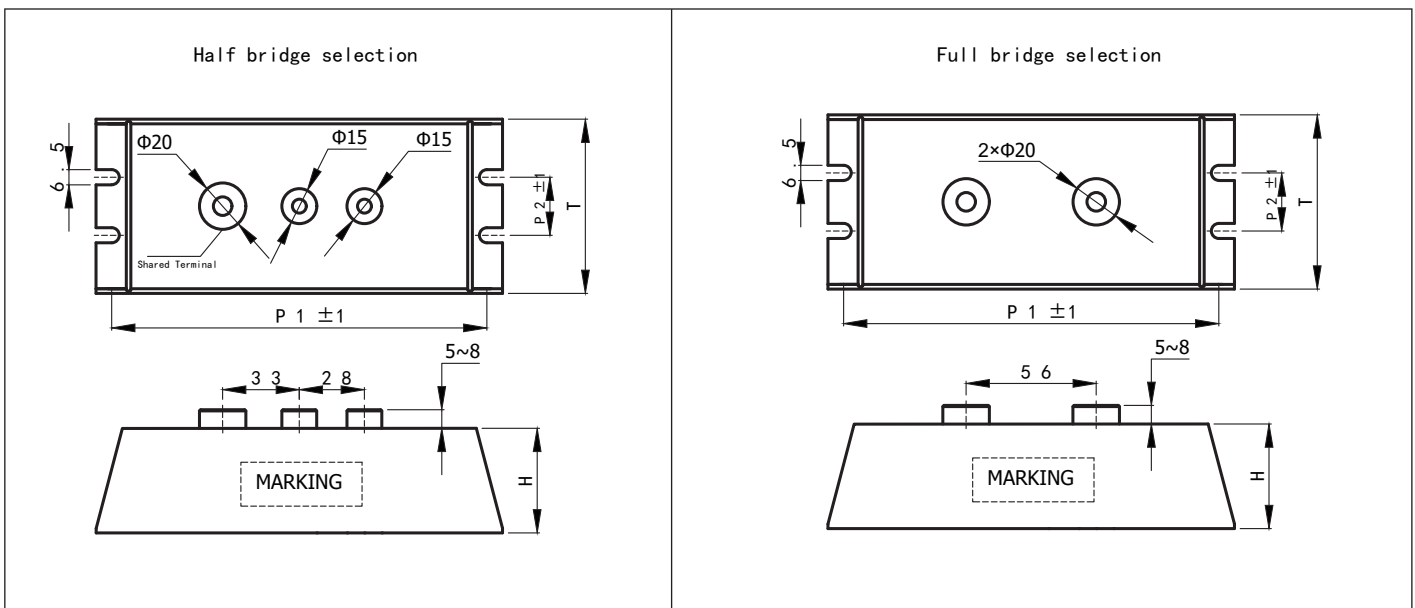
Construction Diagram



Typical Link Figure



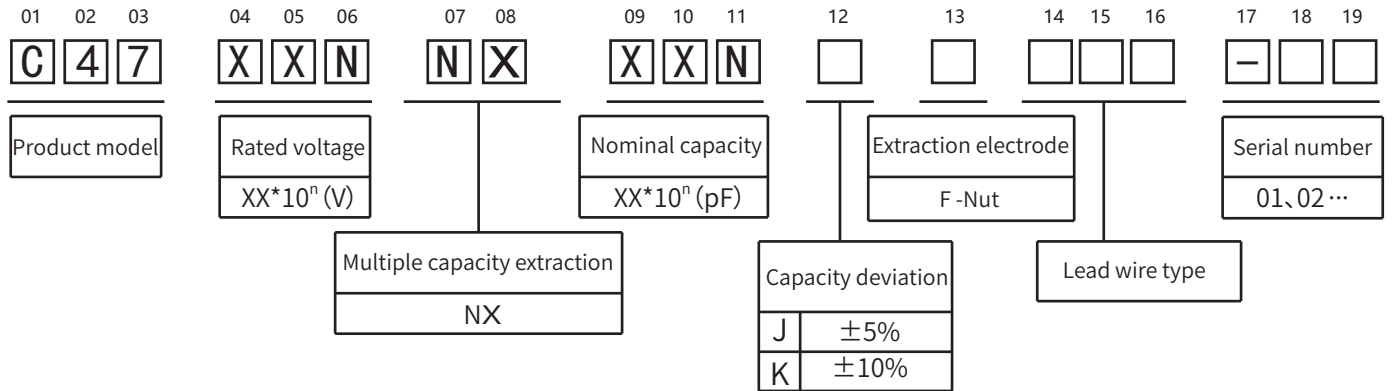
Product Shape



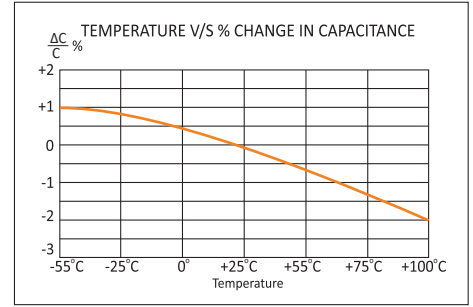
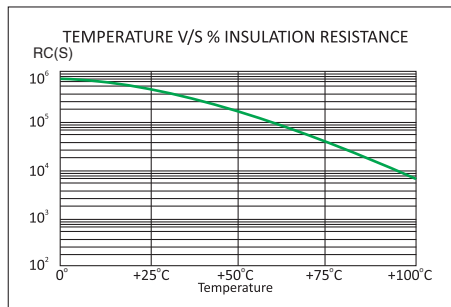
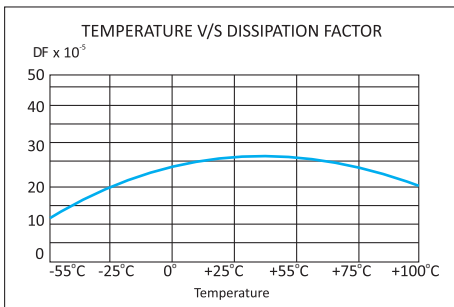
C47

Resonant Capacitor

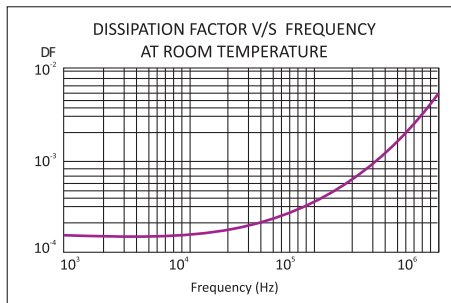
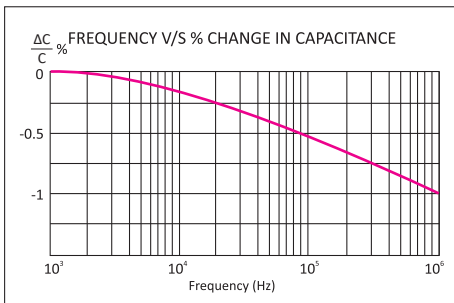
Product Coding



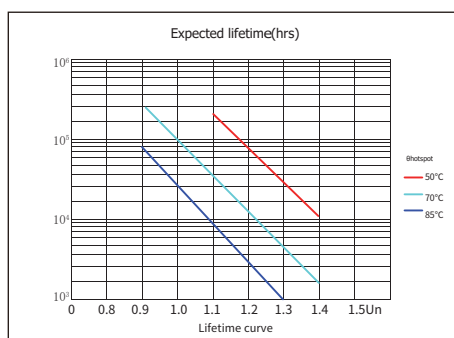
Frequency Characteristics



Temperature Characteristics



Life Expectancy



Article Table

Part Number	CAP (μ F)	Power Reference	L (mm)	T (mm)	H (mm)	P1+P2 (mm)	Irms (A)	dV/dt (V/ μ s)	Lead-out method
Un=2500V.DC									
C472522 \times 904JF-01	2 \times 0.9	Half Bridge 15KW	175	74	45	33+28	2 \times 80A	1000	M8+2 \times M6 Nut
Un=3000V.DC									
C473022 \times 604JF-01	2 \times 0.6	Half Bridge 8~12KW	165	65	45	33+28	2 \times 60A	1000	M8+2 \times M6 Nut
C473022 \times 804JF-01	2 \times 0.8	Half Bridge 15~20KW	175	74	45	33+28	2 \times 80A	1000	M8+2 \times M6 Nut
C473022 \times 105JF-01	2 \times 1.0	Half Bridge 20~25KW	195	85	45	33+28	2 \times 85A	1000	M8+2 \times M6 Nut
C473022 \times 125JF-01	2 \times 1.2	Half Bridge 25~30KW	195	85	45	33+28	2 \times 90A	1000	M8+2 \times M6 Nut
Un=3600V.DC									
C47362105JFM8-01	1.0	Full Bridge 30KW	175	74	45	56	110A	1000	2 \times M8 Nut
C47362125JFM8-01	1.2	Full Bridge 40KW	195	85	45	56	120A	1000	2 \times M8 Nut
C473621355JFM8-01	1.35	Full Bridge 50KW	205	94	45	56	130A	1000	2 \times M8 Nut

The above table / graphics are for reference only, subject to the actual product (unit: mm)

Note: Maximum Irms current at 100kHz, Tamb=70°C Δ T \leq 15°C.