

C41

Water Cooled Resonant Capacitor

Water Cooled Resonant Capacitor C41-BB3



Characteristics

- Conduction water-cooled
- Polypropylene dielectric
- Low dissipation factor($\text{tg}\delta$), low ESL and low ESR
- High voltage, high frequency and high dv/dt
- High current resistance, excellent heat dissipation

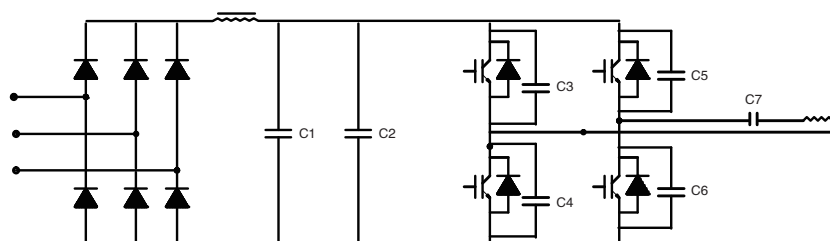
Application

- Widely used in high power and high frequency resonant devices

Technical Data

● Reference standards	GB/T 3984-2004 IEC 60110.1
● Operating temperature range	-40°C~+85°C
● Capacitance range	0.1µF~85µF
● Rated capacitance	100kVar-1500 kVar
● Rated voltage	400VAC-1100VAC
● Tolerance	±5% ±10%
● Test voltage between terminals	1.5 U_{NAC} 10s
	3.5 U_{NDC} 10s at 25°C±5°C
● Dissipation factor	$\text{tg}\delta \leq 5 \times 10^{-4}$ at 25°C±5°C, 1kHz
● Insulation resistance	$R \cdot C \geq 3000\text{s}$, at 100VDC, 25°C±5°C, 60s
● Life expectancy	100000h at U_{N} and 70°C, 30000h at U_{rms}

Typical Circuit

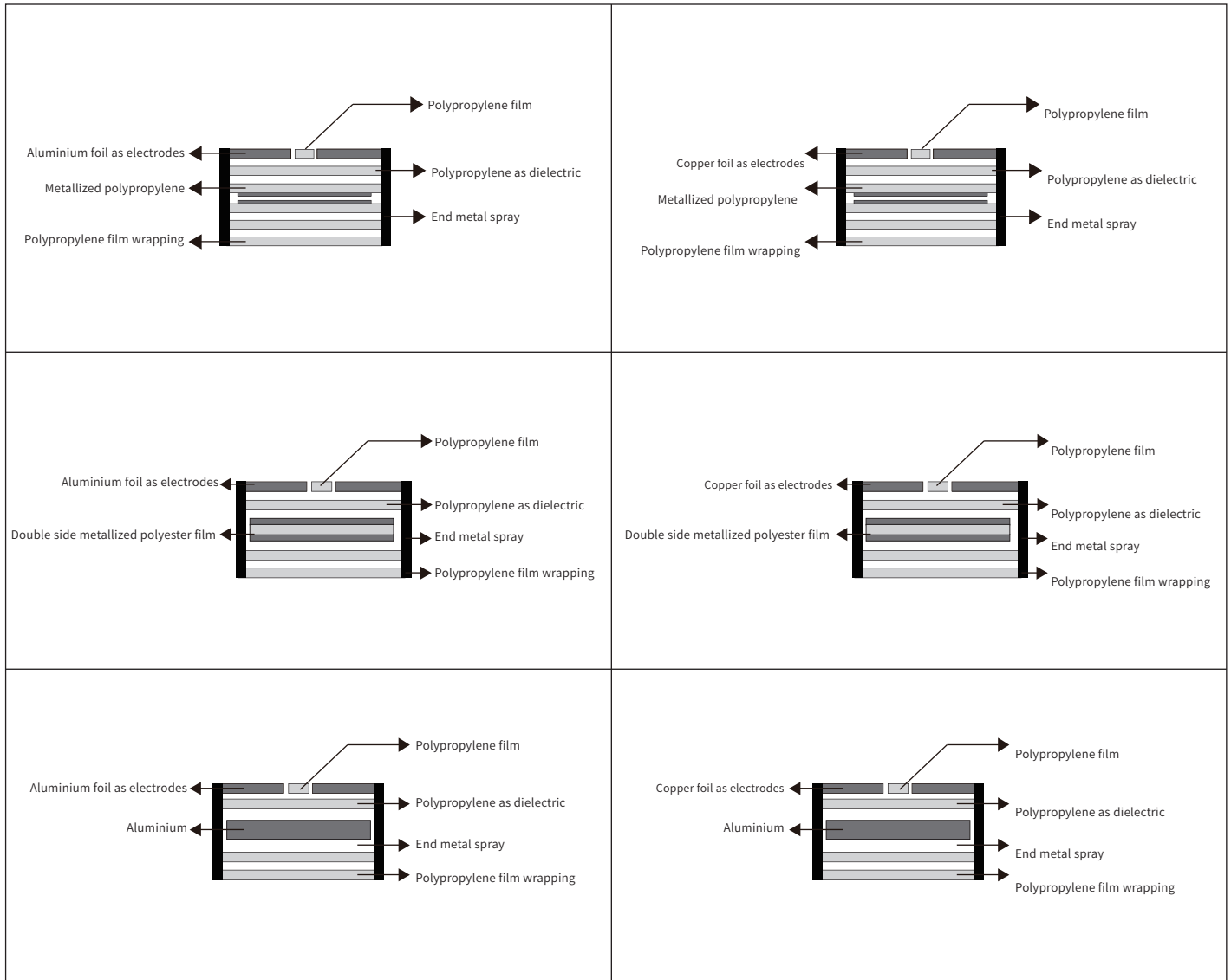


C7 is the water-cooled capacitor in the series resonant capacitor

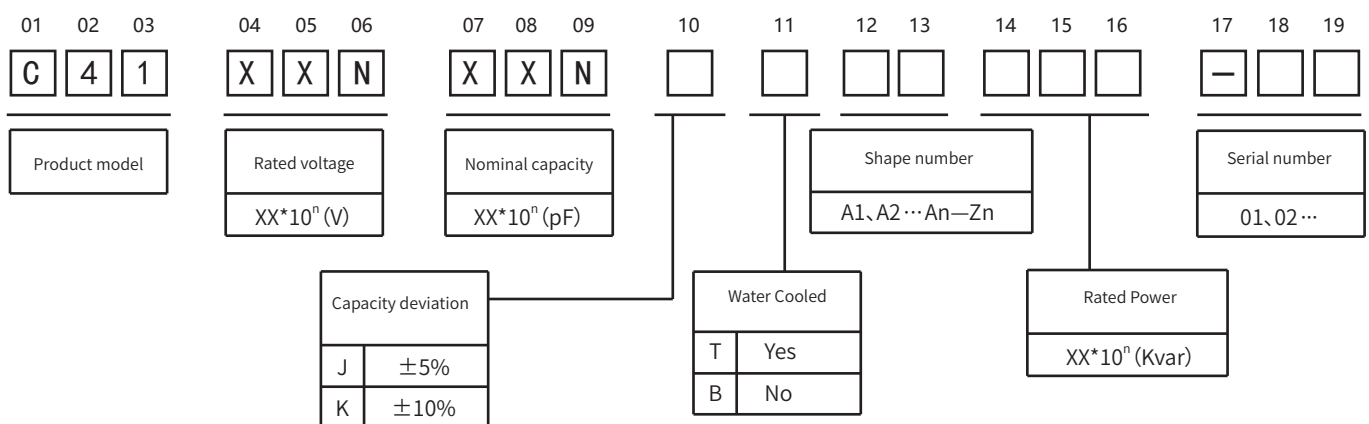
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Construction Diagram



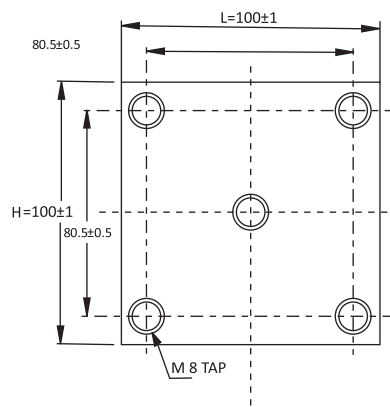
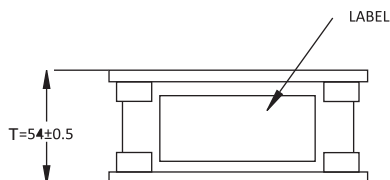
Product Coding



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Article Table

Part Number	Rated Voltage Vrms	Nominal Capacitance μF at 1Khz	Max Irms A	Max Power kVar	Freq Range @Full Power (kHz)	ESR mΩ	Dimension (mm)			Case Code
							L	H	T	
C41601655KBB3401...	600	6.50	1000	400	27-62	1.2	100	100	54	BB3
C41601855KBB3401...	600	8.50	1000	400	30-47	1.0	100	100	54	BB3
C41601106KBB3401...	600	10.00	1000	400	18-40	0.8	100	100	54	BB3
C41501206KBB3401...	500	20.00	1000	400	13-15	0.6	100	100	54	BB3
C41401406KBB3401...	400	40.00	1000	400	10	0.4	100	100	54	BB3

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							L	H	T	
C41112125KBB3501...	1100	1.2	600	500	55-96	1.5	100	100	54	BB3
C41112145KBB3501...	1100	1.4	600	500	46-83	1.2	100	100	54	BB3
C41751305KBB3501...	750	3.0	800	500	47-68	1.1	100	100	54	BB3
C41751335KBB3501...	750	3.3	800	500	43-62	1.0	100	100	54	BB3
C41901405KBB3501...	900	4.0	700	500	25-39	0.9	100	100	54	BB3
C41701565KBB3501...	700	5.6	1000	500	29-57	0.9	100	100	54	BB3
C41701635KBB3501...	700	6.3	1000	500	26-51	0.8	100	100	54	BB3
C41701855KBB3501...	700	8.5	1000	500	19-38	0.7	100	100	54	BB3
C41701106KBB3501...	700	10	1000	500	16-32	0.6	100	100	54	BB3
C41501216KBB3501...	500	21	1000	500	15	0.4	100	100	54	BB3
C41551276KBB3501...	550	27	1000	500	10-12	0.3	100	100	54	BB3
C41501336KBB3501...	500	33	1000	500	10	0.3	100	100	54	BB3
C41501376KBB3501...	500	37	1000	500	9	0.2	100	100	54	BB3

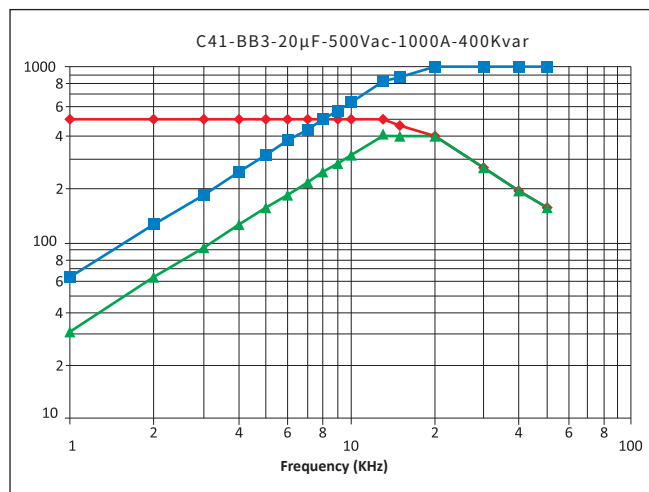
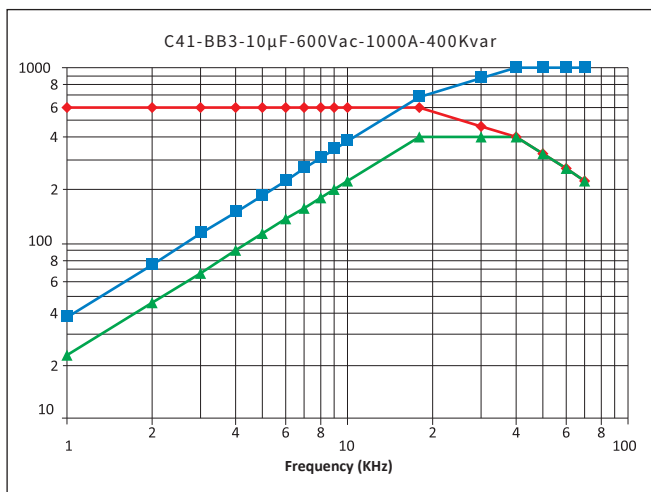
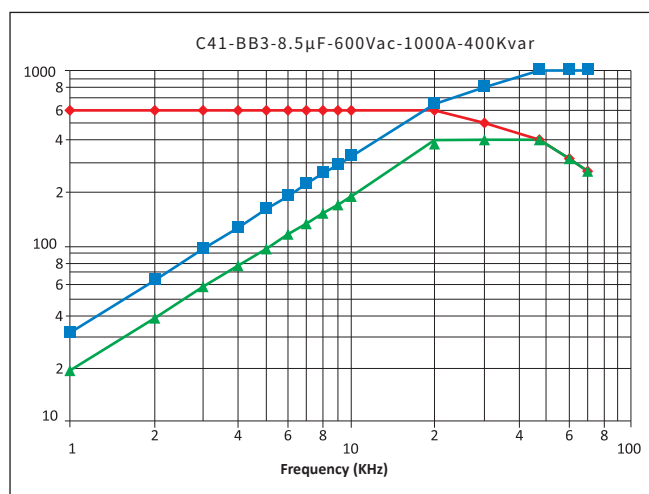
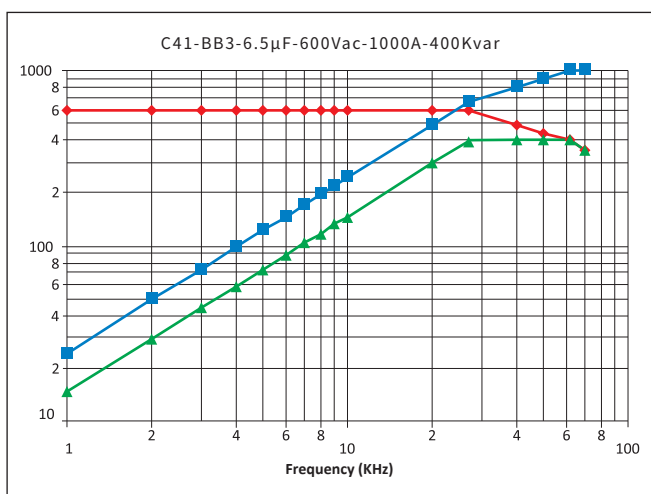
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Part Number	Rated Voltage Vrms	Nominal Capacitance μF at 1KHz	Max Irms A	Max Power kVar	Freq Range @Full Power (kHz)	ESR m Ω	Dimension (mm)			Case Code
							L	H	T	
C41102334KBB3601...	1000	0.33	600	600	290	1.0	100	100	54	BB3
C41102504KBB3601...	1000	0.50	700	600	191-260	0.9	100	100	54	BB3
C41102664KBB3601...	1000	0.66	700	600	145-197	0.8	100	100	54	BB3
C41901135KBB3601...	900	1.33	950	600	89-180	0.3	100	100	54	BB3
C41701265KBB3601...	700	2.60	1050	600	76-112	0.3	100	100	54	BB3
C41501505KBB3601...	500	5.00	1200	600	76	0.2	100	100	54	BB3

Temperature Characteristics

—●— Voltage —■— Current —▲— Power

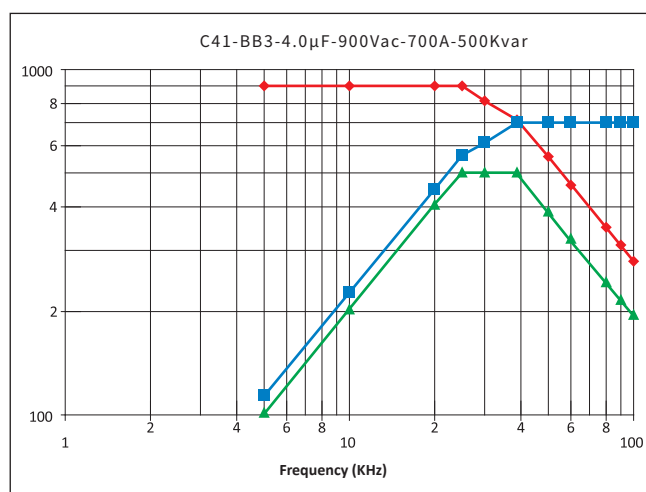
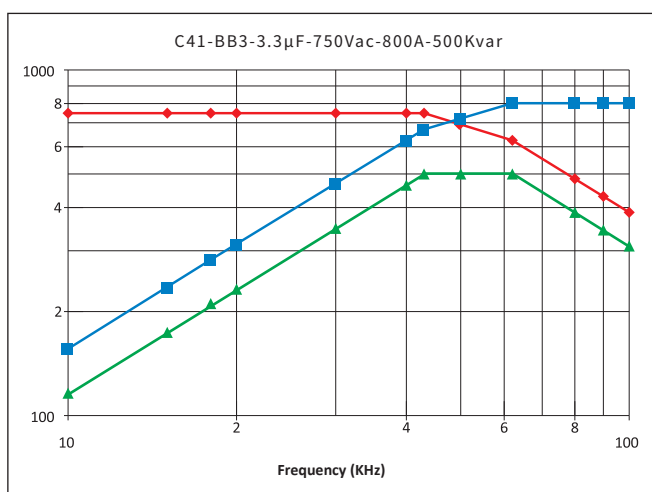
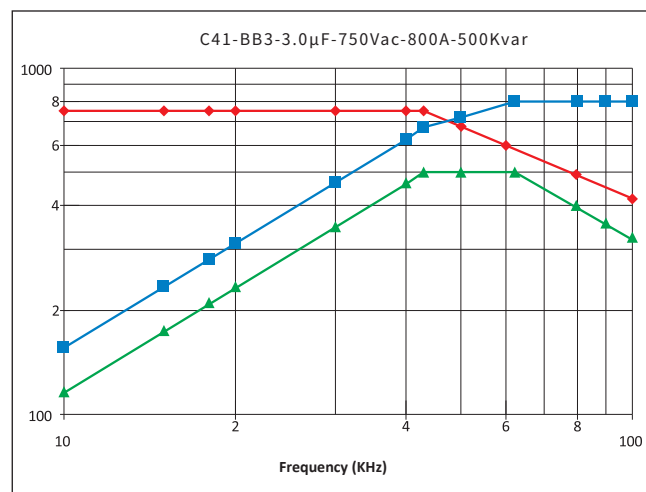
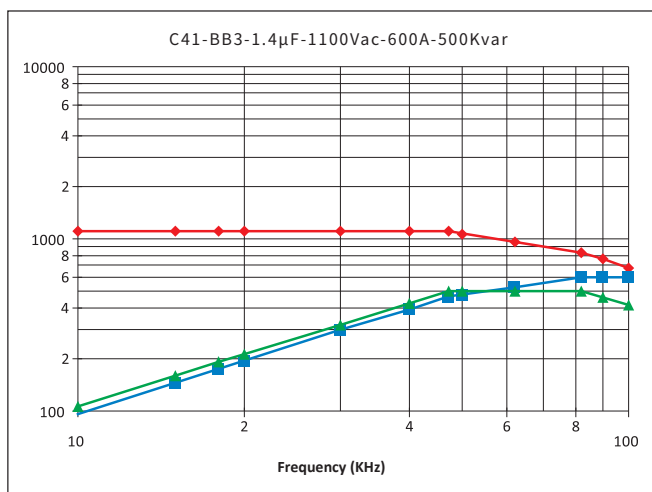
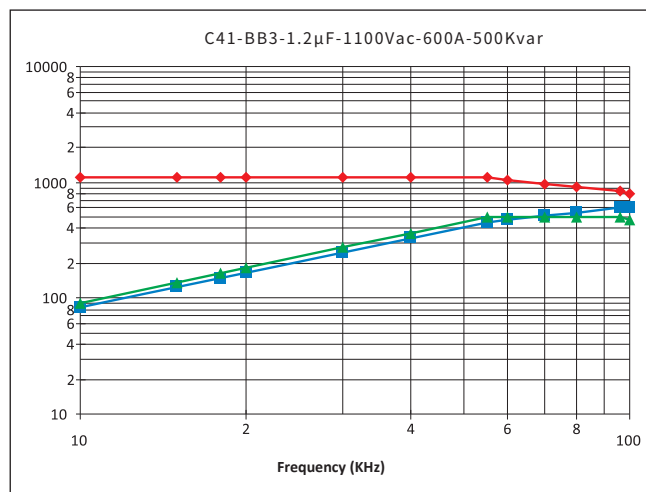
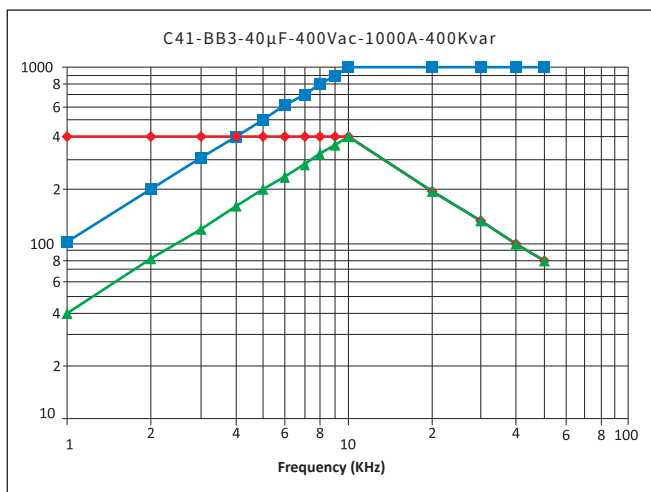


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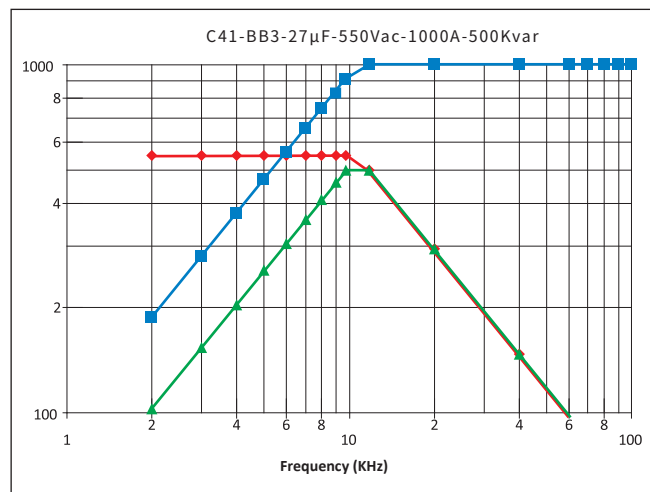
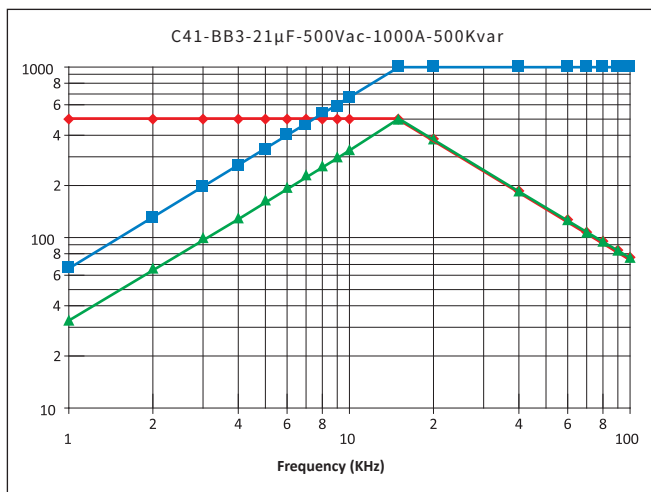
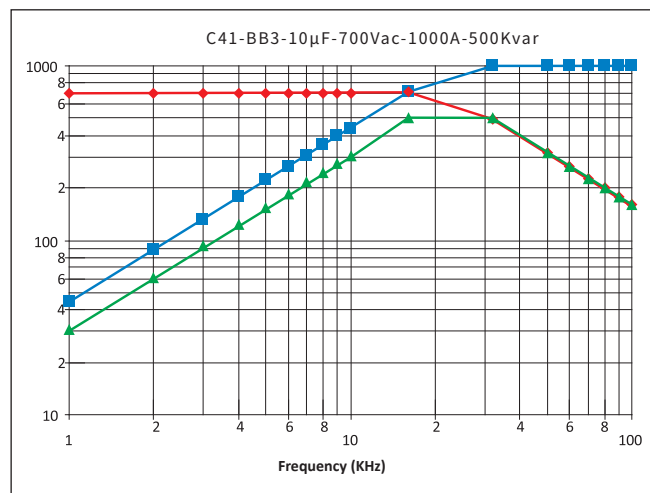
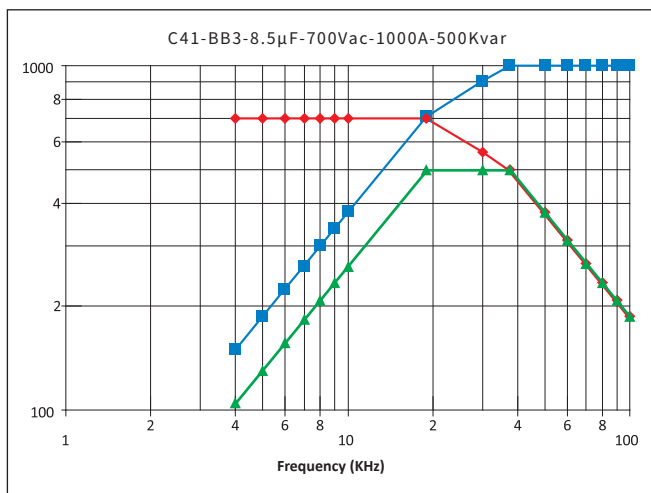
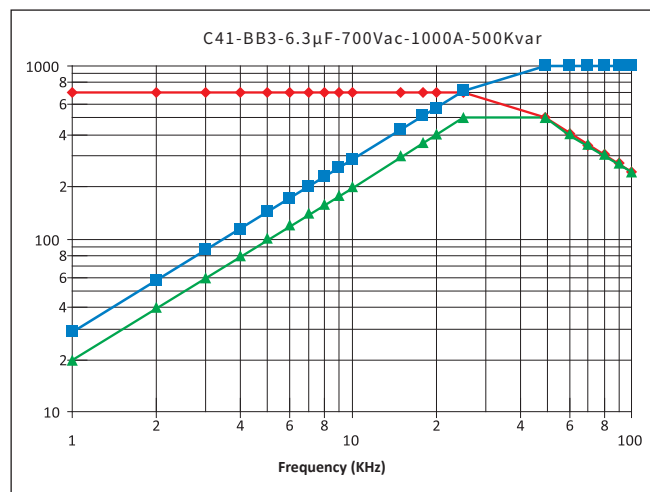
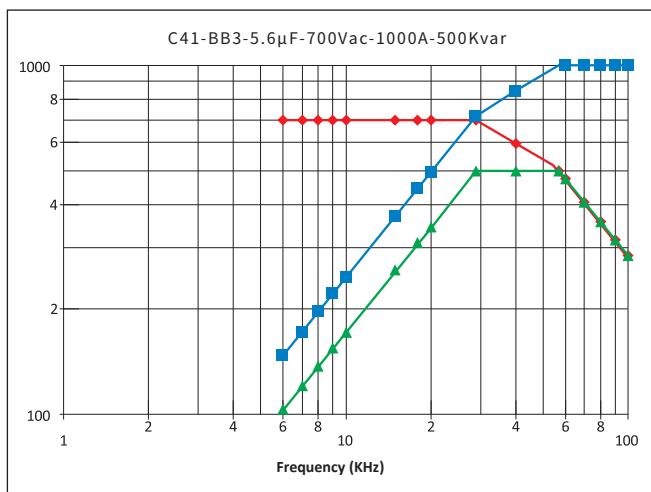


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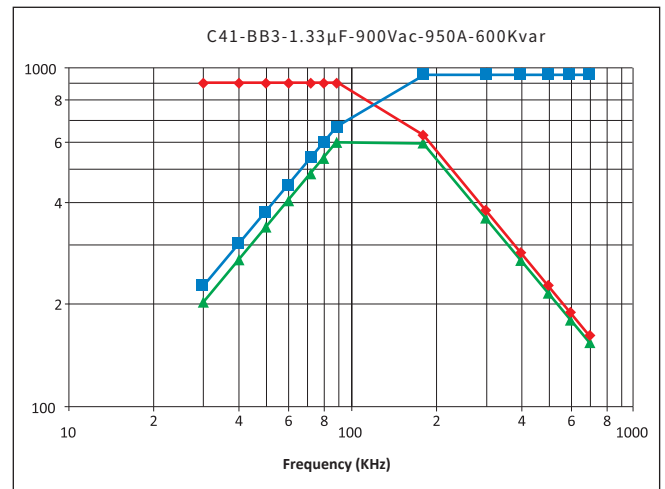
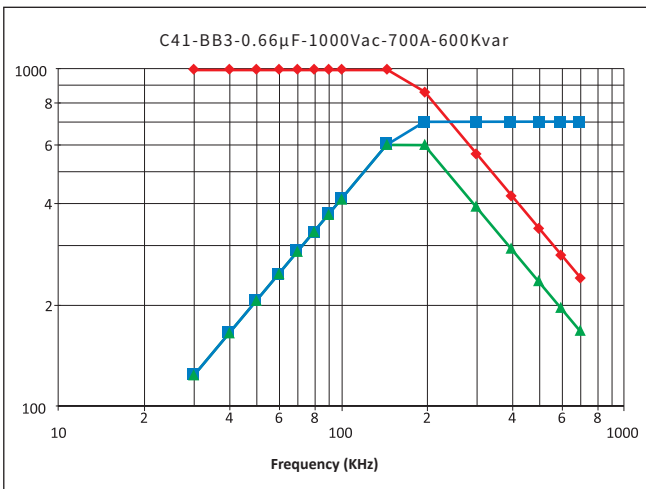
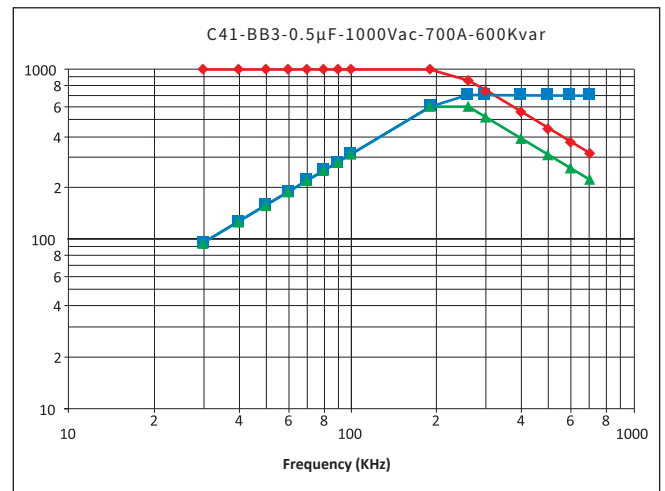
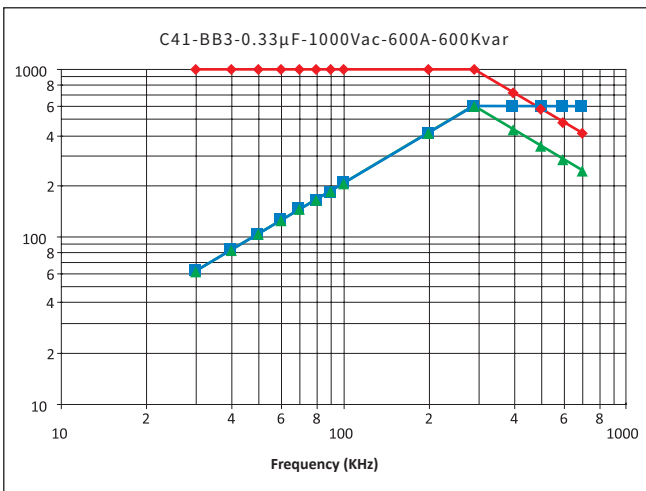
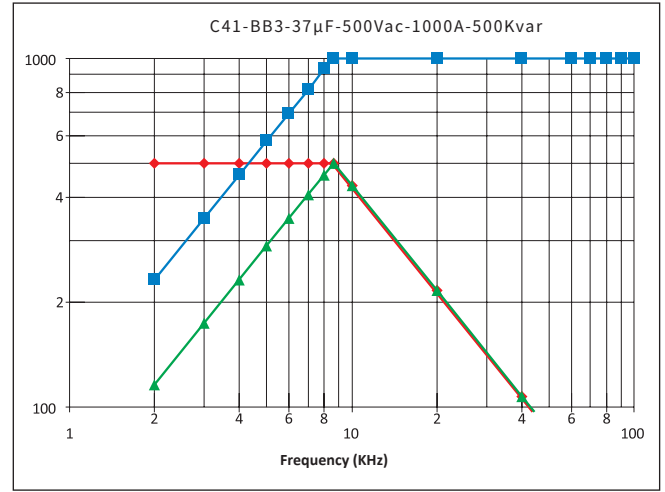
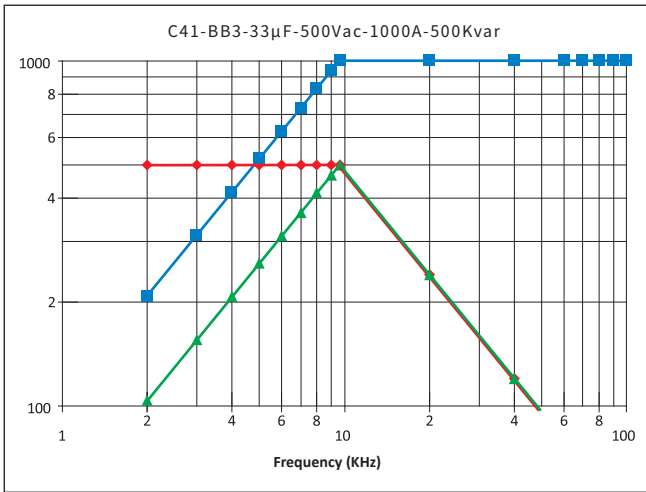


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