

THB Grade Box type DC-Link Film Capacitors



DPB series High robustness under high Temp. and high Humidity



FEATURES

- Dry type structure
- Long lifetime expectancy, up to 25 years
- High over-voltage and over-current
- Self-healing
- High capacitance density
- **THB Grade IIIB***

APPLICATIONS

- Motor drives
- Solar inverter
- UPS system
- Welding equipment



*THB Grade IIIB: 85°C / 85%RH, 1000h at U_{ndc}

DPB SERIES THB GRADE BOX TYPE DC LINK CAPACITOR

The DPB capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire leads out. These DPB series is suitable for harsh environment conditions and compliant to THB Grade IIIB. Widely used in high performance DC Link, DC filtering, frequency converters, industrial power supply, solar inverter and energy storage.

■ ELECTRICAL CHARACTERISTICS

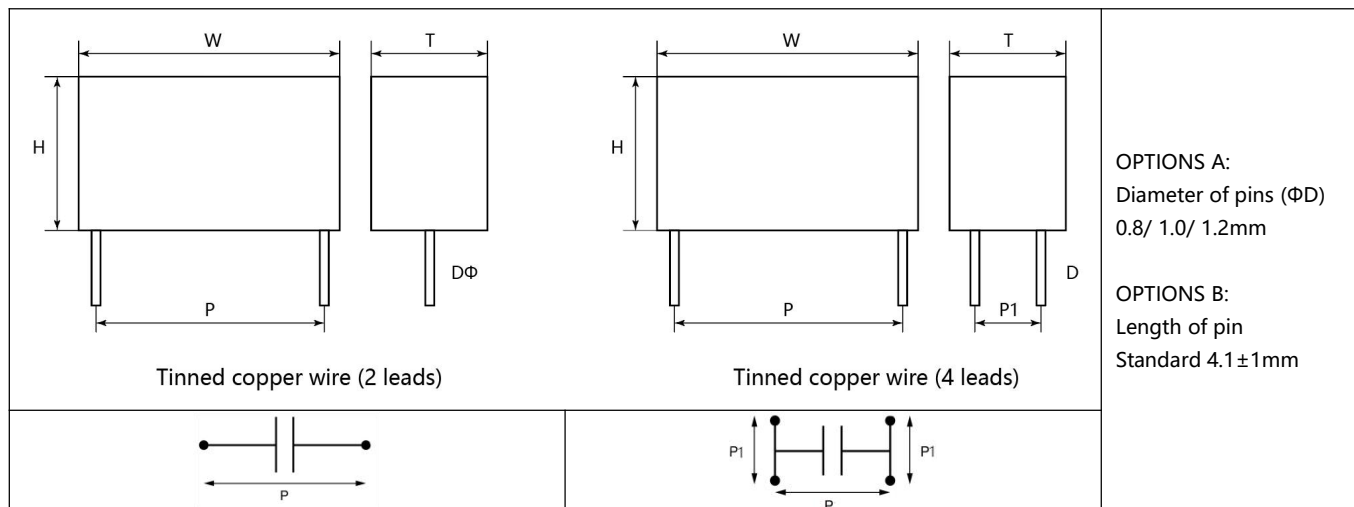
Capacitance Range:	1~500 μ F
Operating Temperature:	-40°C~+85°C (105°C at voltage derating)
Capacitance Tolerance:	$\pm 5\%$ (J); $\pm 10\%$ (K)
Rated Voltage (U_n):	400~2000V _{dc}
Test Voltage between Terminal:	1.5 U_n 60s
Operating voltage:	1.10 U_n (30% of on load duration) 1.15 U_n (30mins/day) 1.2 U_n (5mins/day) 1.3 U_n (1min/day)
Insulation Resistance:	$R \cdot C \geq 5000s$ (100V _{dc} , 60s, 25 \pm 8°C)
Max.Altitude:	<4000m
Flame Resistance:	UL 94 V-0
Lifetime Expectancy:	$\geq 100,000$ Hours (U_n , $\theta_{h.s.} \leq 70^\circ C$)
Failure:	50FIT

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OUTLINE DRAWING



COMMON DESIGN

Rated Voltage	Capacitance (μF)	Dimensions (mm)			Pitch (mm)		RMS current (A)
U_{ndc}	C_n	W	T	H	P	P1	I_{rms}
500	10 μF	41	13	24	37.5	/	7
	20 μF	42	18	31.5	37.5	/	10
	50 μF	42.5	30	45	37.5	20	16
	100 μF	57.5	35	50	52.5	20	18
	150 μF	57.5	42.5	56	52.5	20	22
600	10 μF	41	13	24	37.5	/	7
	15 μF	41	16	28.5	37.5	/	9
	30 μF	41	22	37	37.5	10	12
	60 μF	42.5	30	45	37.5	20	17
	100 μF	57.5	35	50	52.5	20	18
700	10 μF	41	16	28.5	37.5	/	8
	15 μF	41	18	31.5	37.5	/	10
	20 μF	41	22	37	37.5	10	12
	30 μF	42	26	41	37.5	15	14
	40 μF	42.5	30	45	37.5	20	17
	50 μF	56.5	26.8	39.2	52.5	15	16
	60 μF	57.5	30	45	52.5	20	17
	80 μF	57.5	35	50	52.5	20	19
	100 μF	57.5	38	54	52.5	20	22

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Rated Voltage (V)	Capacitance (μF)	Dimensions (mm)			Pitch (mm)		RMS current (A)
U_{ndc}	C_n	W	T	H	P	P1	I_{rms}
800	10 μF	41	18	31.5	37.5	/	10
	20 μF	42	24	36	37.5	15	14
	40 μF	56.5	26.8	39.2	52.5	15	16
	60 μF	57.5	35	50	52.5	20	19
	80 μF	57.5	38	54	52.5	20	22
900	10 μF	41	18	31.5	37.5	/	10
	15 μF	41	22	37	37.5	10	12
	30 μF	42.5	30	45	37.5	20	16
	50 μF	57.5	30	45	52.5	20	17
	80 μF	57.5	38	54	52.5	20	22
1000	10 μF	41	22	37	37.5	10	12
	15 μF	41	26	41	37.5	15	15
	20 μF	42.5	30	45	37.5	20	17
	30 μF	57.5	30	45	52.5	20	17
	50 μF	57.5	38	54	52.5	20	22
1100	10 μF	41	22	37	37.5	10	12
	15 μF	41	26	41	37.5	15	15
	20 μF	42.5	30	45	37.5	20	17
	50 μF	57.5	38	54	52.5	20	22
1200	10 μF	41	26	41	37.5	15	14
	20 μF	57.5	30	45	52.5	20	16
	30 μF	57.5	35	50	52.5	20	20

* CABO reserves the right to make changes without further notice to any products herein to improve reliability, function or design.

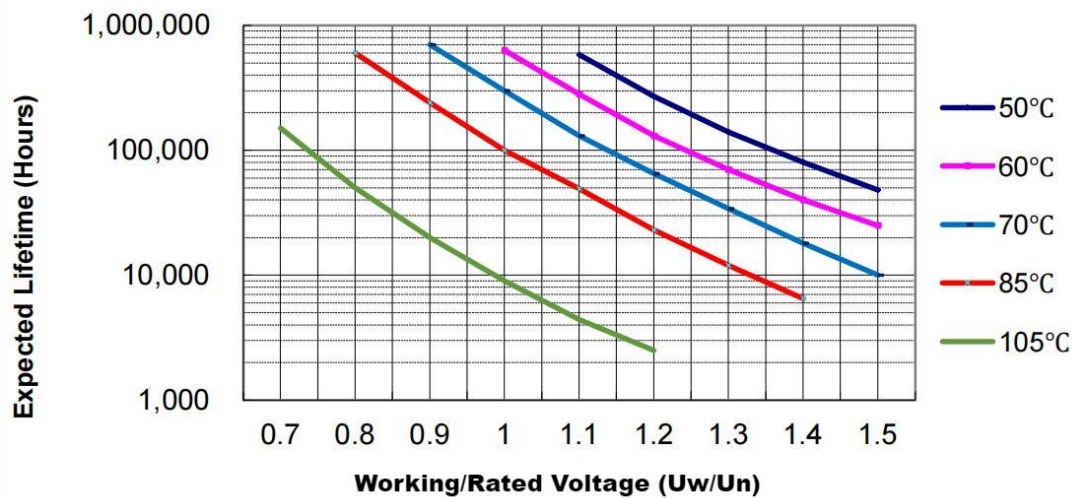
* Other values and dimensions are available on request.

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Expected lifetime curve under different working voltage and temperature



For capacitors application, various factors will affect the expected life of capacitors such as voltage, temperature, current, network harmonics, lighting or radiation and other unknown factors. The above lifetime curve only considers the effects of voltage and temperature. Based on the qualified results of long-term durability test, the lifetime curve of the capacitor under different working conditions is calculated by using the theoretical calculation formula of lifetime. Therefore, the lifetime curve is only used as a reference for selection, and does not represent the actual service life of the capacitor, nor does it represent the quality assurance requirements.

RELATED CAPACITOR SERIES



CABO is a leading brand of high reliability capacitors, providing specifically designed solutions to meet the reliability needs of industrial, military, medical and specialized applications worldwide.

As a well-known brand of China, CABO capacitors are among the world's most reliable component. Focus on High-End global markets and High reliability request fields, providing customization services. With world-class design, testing and manufacturing facilities in China, enable the quick turn-around for fast and mass delivery worldwide.

Our extensive custom design and development capabilities coupled with standardized mass production capacity offerings allow us to be a competitive option for power electronics industry.