

外形尺寸 Dimensions(mm)

250VDC						
CAP (μ F)	DIMENSIONS尺寸 (mm)					CARLI P/N
	W (Max mm)	H (Max mm)	T (Max mm)	d Φ (\pm 0.05 mm)	P (\pm 1 mm)	
0.01	10.5	9	6	0.6	7.5	AH103*2E07
0.015	10.5	9	6	0.6	7.5	AH153*2E07
0.022	10.5	9	6	0.6	7.5	AH223*2E07
0.033	10.5	9	6	0.6	7.5	AH333*2E07
0.047	10.5	9.5	6	0.6	7.5	AH473*2E07
0.068	10.5	11	7	0.6	7.5	AH683*2E07
0.1	10.5	10.5	7.5	0.6	7.5	AH104*2E07
0.01	12.5	9	6	0.6	10	AH103*2E10
0.015	12.5	9	6	0.6	10	AH153*2E10
0.022	12.5	9	6	0.6	10	AH223*2E10
0.033	12.5	10	6	0.6	10	AH333*2E10
0.047	12.5	11	7	0.6	10	AH473*2E10
0.068	12.5	11	8	0.6	10	AH683*2E10
0.1	12.5	11	6.5	0.6	10	AH104*2E10
0.15	12.5	13	7	0.6	10	AH154*2E10
0.22	12.5	13	8	0.6	10	AH224*2E10
0.33	12.5	14	6.5	0.6	10	AH334*2E10
0.47	12.5	15	7.5	0.6	10	AH474*2E10
0.68	12.5	18	9	0.6	10	AH684*2E10
1.0	12.5	20.5	9	0.8	10	AH105*2E10
0.22	17.5	13.5	7	0.6	15	AH224*2E15
0.33	17.5	15	8	0.8	15	AH334*2E15
0.47	17.5	13.5	6.5	0.8	15	AH474*2E15
0.68	17.5	15	7.5	0.8	15	AH684*2E15
1.0	17.5	16	8	0.8	15	AH105*2E15
1.5	17.5	18.5	10.5	0.8	15	AH155*2E15
2.2	17.5	22	12	0.8	15	AH225*2E15
1.5	25.5	16.5	9	0.8	22.5	AH155*2E22
2.2	25.5	18.5	10.5	0.8	22.5	AH225*2E22

400VDC#/450VDC						
CAP (μ F)	DIMENSIONS尺寸 (mm)					CARLI P/N
	W (Max mm)	H (Max mm)	T (Max mm)	d Φ (\pm 0.05 mm)	P (\pm 1 mm)	
0.01	10.5	9	6	0.6	7.5	AH103*2Y07
0.015	10.5	10	7	0.6	7.5	AH153*2Y07
0.022	10.5	12.5	7.5	0.6	7.5	AH223*2Y07
0.033	10.5	10	7	0.6	7.5	AH333*2Y07
0.047	10.5	12	7	0.6	7.5	AH473*2Y07
0.068	10.5	13	8	0.6	7.5	AH683*2Y07
0.1	10.5	11	7.5	0.6	7.5	AH104*2Y07
0.01	12.5	9	6	0.6	10	AH103*2Y10
0.015	12.5	9	6	0.6	10	AH153*2Y10
0.022	12.5	11	7	0.6	10	AH223*2Y10
0.033	12.5	10	6	0.6	10	AH333*2Y10
0.047	12.5	11	7	0.6	10	AH473*2Y10
0.068	12.5	11	8	0.6	10	AH683*2Y10
0.1	12.5	8.5	5	0.6	10	AH104*2Y10
0.1	12.5	11	6.5	0.6	10	AH104*2Y10A
0.15	12.5	10	6	0.6	10	AH154*2Y10
0.22	12.5	11.5	6.5	0.6	10	AH224*2Y10
0.33	12.5	14	6.5	0.6	10	AH334*2Y10
0.47	12.5	15	8	0.6	10	AH474*2Y10
0.68	12.5	16.5	9	0.6	10	AH684*2Y10
1.0	12.5	20.5	10	0.8	10	AH105*2Y10
0.22	17.5	12	7	0.6	15	AH224*2Y15
0.33	17.5	13	8	0.8	15	AH334*2Y15
0.47	17.5	13.5	7	0.8	15	AH474*2Y15
0.68	17.5	15	7	0.8	15	AH684*2Y15
1.0	17.5	16	8	0.8	15	AH105*2Y15
1.5	17.5	19	9.5	0.8	15	AH155*2Y15
2.2	17.5	22	12	0.8	15	AH225*2Y15
1.5	25.5	16.5	9	0.8	22.5	AH155*2Y22
2.2	25.5	19.5	9	0.8	22.5	AH225*2Y22

外形尺寸 Dimensions(mm)

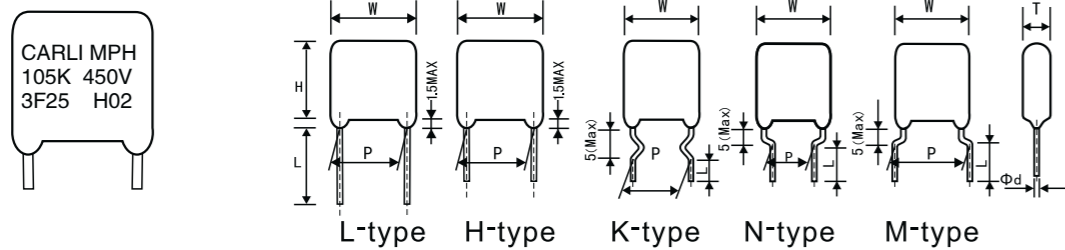
500VDC#/550VDC						
CAP (μ F)	DIMENSIONS尺寸 (mm)					CARLI P/N
	W(Max mm)	H(Max mm)	T(Max mm)	d Φ (\pm 0.05 mm)	P(\pm 1 mm)	
0.022	10.5	9	6	0.6	7.5	AH223*2X07
0.033	10.5	9	6	0.6	7.5	AH333*2X07
0.047	10.5	9.5	6	0.6	7.5	AH473*2X07
0.068	10.5	11	7	0.6	7.5	AH683*2X07
0.01	12.5	9	6	0.6	10	AH103*2X10
0.015	12.5	9	6	0.6	10	AH153*2X10
0.022	12.5	11	7	0.6	10	AH223*2X10
0.033	12.5	11.5	7.5	0.6	10	AH333*2X10
0.047	12.5	11	7	0.6	10	AH473*2X10
0.068	12.5	11.5	7	0.6	10	AH683*2X10
0.1	12.5	11	5.5	0.6	10	AH104*2X10
0.15	12.5	12	8	0.6	10	AH154*2X10
0.22	12.5	13	10	0.6	10	AH224*2X10
0.22	17.5	11.5	7	0.6	15	AH224*2X15
0.33	17.5	15	8	0.8	15	AH334*2X15
0.47	17.5	15.5	8	0.8	15	AH474*2X15
0.68	17.5	18	11	0.8	15	AH684*2X15
1.0	17.5	21.5	11	0.8	15	AH105*2X15
1.0	25.5	20	10.5	0.8	22.5	AH105*2X22
1.5	25.5	23	13	0.8	22.5	AH155*2X22
2.2	25.5	24	13	0.8	22.5	AH225*2X22

630VDC						
CAP (μ F)	DIMENSIONS尺寸 (mm)					CARLI P/N
	W(Max mm)	H(Max mm)	T(Max mm)	d Φ (\pm 0.05 mm)	P(\pm 1 mm)	
0.01	10.5	9	6	0.6	7.5	AH103*2J07
0.015	10.5	9	6	0.6	7.5	AH153*2J07
0.022	10.5	12.5	7.5	0.6	7.5	AH223*2J07
0.033	10.5	10	7	0.6	7.5	AH333*2J07
0.047	10.5	12	7	0.6	7.5	AH473*2J07
0.068	10.5	13	8	0.6	7.5	AH683*2J07
0.01	12.5	9	6	0.6	10	AH103*2J10
0.015	12.5	9	6	0.6	10	AH153*2J10
0.022	12.5	11	7.5	0.6	10	AH223*2J10
0.033	12.5	12	8	0.6	10	AH333*2J10
0.047	12.5	11	7	0.6	10	AH473*2J10
0.068	12.5	13	9	0.8	15	AH683*2J15
0.1	17.5	12	8	0.8	15	AH104*2J15
0.022	17.5	14	8	0.6	15	AH224*2J15
0.33	17.5	16	11	0.8	15	AH334*2J15
0.47	17.5	19	13	0.8	15	AH474*2J15
0.68	25.5	18	11	0.8	22.5	AH684*2J22
1.0	25.5	20	13	0.8	22.5	AH105*2J22
1.5	25.5	25	15	0.8	22.5	AH155*2J22

備註:

- "*" 表示容量誤差。
 - "■" 表示內部特微碼。
 - "●" 表示引線加工形式代碼。
 - "□□□" 表示引線長度代碼。
 - "○" 表示引線長度誤差代碼。
 - "R"=ROHS符合型;
"H"=Halogen-Free無鹵型。
 - "#" 當額定電壓為500Vdc時,第7-8位是2H。 "H" when the rated voltage is 500Vdc, the digit 7-8 is 2H.
- "*" = capacitance tolerance code, J= \pm 5%, K= \pm 10%, M= \pm 20%.
 "■" = Internal use.
 "●" = Lead Form Code : "L", "H", "K", "M", "N".....
 "□□□" = Lead Length Code : "270", "200", "035".....
 "○" = Lead Length Tolerance Code : " \pm 0.3", " \pm 0.5", " \pm 1".....
 "R" = ROHS compliant.
 "H" = Halogen-Free compliant.

小型化金屬化聚丙烯膜電容器 (浸漬型)
Mini-sized Metallized Polypropylene Film Capacitor (Dipped)

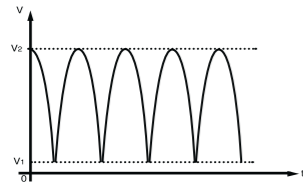


特點

- 金屬化聚丙烯膜, 無感捲繞結構
- 小型化, 良好自愈性
- 阻燃環氧樹脂粉末塗裝

典型應用

- 用於開關電源, 電子鎮流器和變頻器等中間電路直流濾波 (DC-link, PFC 等)



Here: $V_1 \geq 0, V_2 \leq U_n, V_{rms} = (V_2 - V_1) / \sqrt{2}, I_m = 2\pi f \times C \times (V_1 - V_2) / \sqrt{2}$
 U_n is the rated voltage of the capacitor

FEATURES:

- Metallized Polypropylene film, non-inductive wound construction
- Mini-size, excellent self-healing
- Flame retardant epoxy powder coating

TYPE APPLICATION:

As intermediate circuit capacitor for SMPS, Electronic Ballast inverter (i.e. DC-link, DC filter and P.F.C)

注: MPH產品只適用於DC濾波和DC模塊電路, 意指施加給電容的電壓必須是單向連波電壓, 電壓代表波型如下圖示。不適用於交流電路, 對此有何疑問請和我們的技術人員聯系。
a: The MPH series is only recommended to use in DC-filter or DC-blocking circuits. It means the voltage applied to the capacitors must be unidirectional ripple voltage. The typical voltage curve is as following reference. If you have any questions for this note, please feel free to contact our technical engineer.

技術要求 specifications

引用標準/Reference Standard	GB/T 10190 (IEC 60384-16)				
氣候類別/Climatic Category	40/105/21				
額定溫度/Rated Temperature	85°C				
工作溫度範圍 Operating Temperature Range	-40°C --- +105°C. (+85°C~+105°C): derating factor 1.5% per °C for R.V(DC)				
額定電壓/Rated voltage	400VDC/450VDC, 500VDC/550VDC, 630VDC				
容量範圍/Capacitance range	0.01 μF ~ 2.2 μF				
容差/Capacitance tolerance	± 5% (J), ± 10% (K)				
耐電壓/Voltage Proof	1.6 * R.V(DC), 2s (between terminals)				
損失角/Dissipation factor	≤ 0.1% (1KHz at 20~25°C)				
絕緣阻抗/Insulation Resistance	≥ 30 000 MΩ, $C_r \leq 0.33 \mu F$ ≥ 10 000 s, $C_r > 0.33 \mu F$ (20°C, 100V, 1min)				
最大脈衝爬升速率 Maximum Pulse Rise Time (dV/dt): 若實際工作電壓U比額定電壓 U_r 低, 電容器可工作在更高的dV/dt場合。這樣dV/dt允許值應為右表值乘 U_r/U 。 If the working voltage (U) is lower than the rated voltage (U_r), the capacitor can be worked at a higher dV/dt. In this case, the maximum allowed dV/dt is obtain by multiplying the right value with U_r/U .	U_r (V)	dV/dt (V/μs)			
		P=7.5	P=10.0	P=15.0	P=22.5
	400/450	320	300	200	100
	500/550	380	350	220	150
630	420	400	300	180	

FILM CAPACITORS

外形尺寸 Dimensions (mm)

CAP (μF)	DIMENSIONS 尺寸 (mm)					CARLI P/N
	W (Max mm)	H (Max mm)	T (Max mm)	d Φ (±0.05 mm)	P (±1 mm)	
400VDC#/450VDC						
0.01	10.5	9	6	0.6	7.5	PH103*2Y07
0.022	10.5	9	6	0.6	7.5	PH223*2Y07
0.033	10.5	9.5	6.5	0.6	7.5	PH333*2Y07
0.047	10.5	12.5	7	0.6	7.5	PH473*2Y07
0.068	10.5	13.5	8	0.6	7.5	PH683*2Y07
0.1	10.5	14.5	9	0.6	7.5	PH104*2Y07
0.01	12.5	9	6	0.6	10	PH103*2Y10
0.022	12.5	9	6	0.6	10	PH223*2Y10
0.033	12.5	9	6	0.6	10	PH333*2Y10
0.047	12.5	11	7	0.6	10	PH473*2Y10
0.068	12.5	12	8	0.6	10	PH683*2Y10
0.1	12.5	10	6	0.6	10	PH104*2Y10
0.15	12.5	11	6.5	0.6	10	PH154*2Y10
0.18	12.5	12.5	7	0.6	10	PH184*2Y10
0.22	12.5	13.5	7	0.6	10	PH224*2Y10
0.33	12.5	14	8	0.6	10	PH334*2Y10
0.47	12.5	16.5	8	0.6	10	PH474*2Y10
0.68	12.5	19	10	0.8	10	PH684*2Y10
1.0	12.5	23	10	0.8	10	PH105*2Y10
0.1	17.5	13.5	8	0.8	15	PH104*2Y15
0.22	17.5	14	7.5	0.8	15	PH224*2Y15
0.33	17.5	13	9	0.8	15	PH334*2Y15A
0.47	17.5	14	6.5	0.8	15	PH474*2Y15
0.56	17.5	15	7	0.8	15	PH564*2Y15
0.68	17.5	15	8	0.8	15	PH684*2Y15
1.0	17.5	17	8.5	0.8	15	PH105*2Y15
1.5	17.5	23.5	10	0.8	15	PH155*2Y15
2.2	17.5	25.5	11.5	0.8	15	PH225*2Y15
1.5	25.5	17.5	9	0.8	22.5	PH155*2Y22
2.2	25.5	20	10	0.8	22.5	PH225*2Y22

CAP (μF)	DIMENSIONS 尺寸 (mm)					CARLI P/N
	W (Max mm)	H (Max mm)	T (Max mm)	d Φ (±0.05 mm)	P (±1 mm)	
500VDC#/550VDC						
0.01	10.5	9	6	0.6	7.5	PH103*2X07
0.022	10.5	9	6	0.6	7.5	PH223*2X07
0.033	10.5	9.5	6.5	0.6	7.5	PH333*2X07
0.047	10.5	12.5	7	0.6	7.5	PH473*2X07
0.01	12.5	10	6	0.6	10	PH103*2X10
0.015	12.5	10	6	0.6	10	PH153*2X10
0.022	12.5	10	6	0.6	10	PH223*2X10
0.033	12.5	10	6.5	0.6	10	PH333*2X10
0.047	12.5	11	7.5	0.6	10	PH473*2X10
0.068	12.5	12	8	0.6	10	PH683*2X10
0.1	12.5	10	7	0.6	10	PH104*2X10

CAP (μF)	DIMENSIONS 尺寸 (mm)					CARLI P/N
	W (Max mm)	H (Max mm)	T (Max mm)	d Φ (±0.05 mm)	P (±1 mm)	
500VDC#/550VDC						
0.15	12.5	12	7	0.6	10	PH154*2X10
0.22	12.5	14	8	0.6	10	PH224*2X10
0.1	17.5	13.5	8	0.8	15	PH104*2X15
0.15	17.5	13.5	8	0.8	15	PH154*2X15
0.22	17.5	13.5	8	0.8	15	PH224*2X15
0.33	17.5	14	8.5	0.8	15	PH334*2X15
0.47	17.5	15	9.5	0.8	15	PH474*2X15
0.68	17.5	17	10.5	0.8	15	PH684*2X15
1.0	17.5	20	12	0.8	15	PH105*2X15
0.68	25.5	16.5	10	0.8	22.5	PH684*2X22
1.0	25.5	21	11	0.8	22.5	PH105*2X22
1.5	25.5	23.5	13.5	0.8	22.5	PH155*2X22
2.2	25.5	26.5	16.5	0.8	22.5	PH225*2X22

CAP (μF)	DIMENSIONS 尺寸 (mm)					CARLI P/N
	W (Max mm)	H (Max mm)	T (Max mm)	d Φ (±0.05 mm)	P (±1 mm)	
630VDC						
0.01	10.5	9	5.5	0.6	7.5	PH103*2J07
0.022	10.5	12.5	7	0.6	7.5	PH223*2J07
0.033	10.5	14	8	0.6	7.5	PH333*2J07
0.01	12.5	10	6	0.6	10	PH103*2J10
0.015	12.5	10	6	0.6	10	PH153*2J10
0.022	12.5	10	6	0.6	10	PH223*2J10
0.033	12.5	10	6.5	0.6	10	PH333*2J10
0.047	12.5	11	7	0.6	10	PH473*2J10
0.068	12.5	11	8	0.6	10	PH683*2J10
0.1	12.5	15	7	0.6	10	PH104*2J10
0.22	12.5	15.5	10.5	0.6	10	PH224*2J10
0.1	17.5	13.5	8	0.8	15	PH104*2J15A
0.22	17.5	13.5	8	0.8	15	PH224*2J15
0.33	17.5	15.5	9.5	0.8	15	PH334*2J15
0.39	17.5	17.5	9.5	0.8	15	PH394*2J15
0.47	17.5	18	10	0.8	15	PH474*2J15
0.68	17.5	21	11.5	0.8	15	PH684*2J15
1.0	17.5	25	15	0.8	15	PH105*2J15
0.68	25.5	17	10	0.8	22.5	PH684*2J22
1.0	25.5	21	11	0.8	22.5	PH105*2J22
1.5	25.5	23.5	13.5	0.8	22.5	PH155*2J22
2.2	25.5	26.5	16.5	0.8	22.5	PH225*2J22