

UNL型 镀金属聚丙烯电解薄膜电容器

## Type UNL ElectroFilm Metallized Polypropylene Capacitors

用于直流高纹波电流特殊设计应用

### Specifically Designed For DC High Ripple Current Applications

低损耗的电解薄膜构造，UNL系列提供高纹波能力和高容量

Constructed with low loss ElectroFilm construction, the UNL series offers high ripple current capabilities and can replace aluminum electrolytic capacitors used in applications requiring high

high capacitance values making them ideal for aluminum electrolytic replacement or applications requiring high ripple current capacitors.



说明

重要特点/应用

### Highlights/Applications

比铝电解更具有优势

- Advantages over Aluminum Electrolytic

异常低的等效串联电阻

- Exceptionally low ESR

10倍的纹波电流承受能力

- Up to 10 times the ripple current

1.25倍的浪涌电压

- 1.25 times rated surge voltage

无极性

- Non-polar

高电压等级

- Higher voltage ratings

干式结构---无电解液

- Dry construction - no electrolyte

改良的可靠性

- Improved reliability

应用范围包括

- Applications include:

高电压逆变

- High Voltage Inverters

直流连接

- DC Bus Link

直流滤波

- DC Filtering

### Specifications

容量范围

**Capacitance Range:** 4.7  $\mu$ F to 35  $\mu$ F

电压范围

**Voltage Range:** 400 Vdc to 1500 Vdc

容差

**Capacitance Tolerance:**  $\pm$ 10%

工作温度范围

**Operating Temperature Range:** -55  $^{\circ}$ C to +85  $^{\circ}$ C

绝缘电阻

**Insulation Resistance:**  $\geq$  10,000 M $\Omega$

纹波电流承受能力

**Ripple Current Capability:**

25 $^{\circ}$ C	16.3 Arms to 22.6 Arms
50 $^{\circ}$ C	13.0 Arms to 18.0 Arms
75 $^{\circ}$ C	7.0 Arms to 12.0 Arms

# Type UNL ElectroFilm Metallized Polypropylene Capacitors

产品型号规律

## Part Numbering System

类型	电压	容量	容差	引线	RoHS环保
UNL	12	W7P5	K	S	-F
<b>Type</b>	<b>Voltage</b>	<b>Capacitance</b>	<b>Tolerance</b>	<b>Leads</b>	<b>RoHS</b>
UNL	4 = 400 Vdc	W4P7 = 4.7 $\mu$ F	K = $\pm 10\%$		Compliant
	5 = 500 Vdc	W7P5 = 7.5 $\mu$ F	J = $\pm 5\%$	S = Short leads	
	6 = 600 Vdc	W10 = 10 $\mu$ F			
	7 = 750 Vdc	W35 = 35 $\mu$ F		Blank = Long leads	
	8 = 800 Vdc			(.300" / 7.62 mm)	
	9 = 900 Vdc				
	10 = 1000 Vdc				
	12 = 1200 Vdc				
	15 = 1500 Vdc				

外型制图

## Outline Drawing

“S”型（短的引针）选择

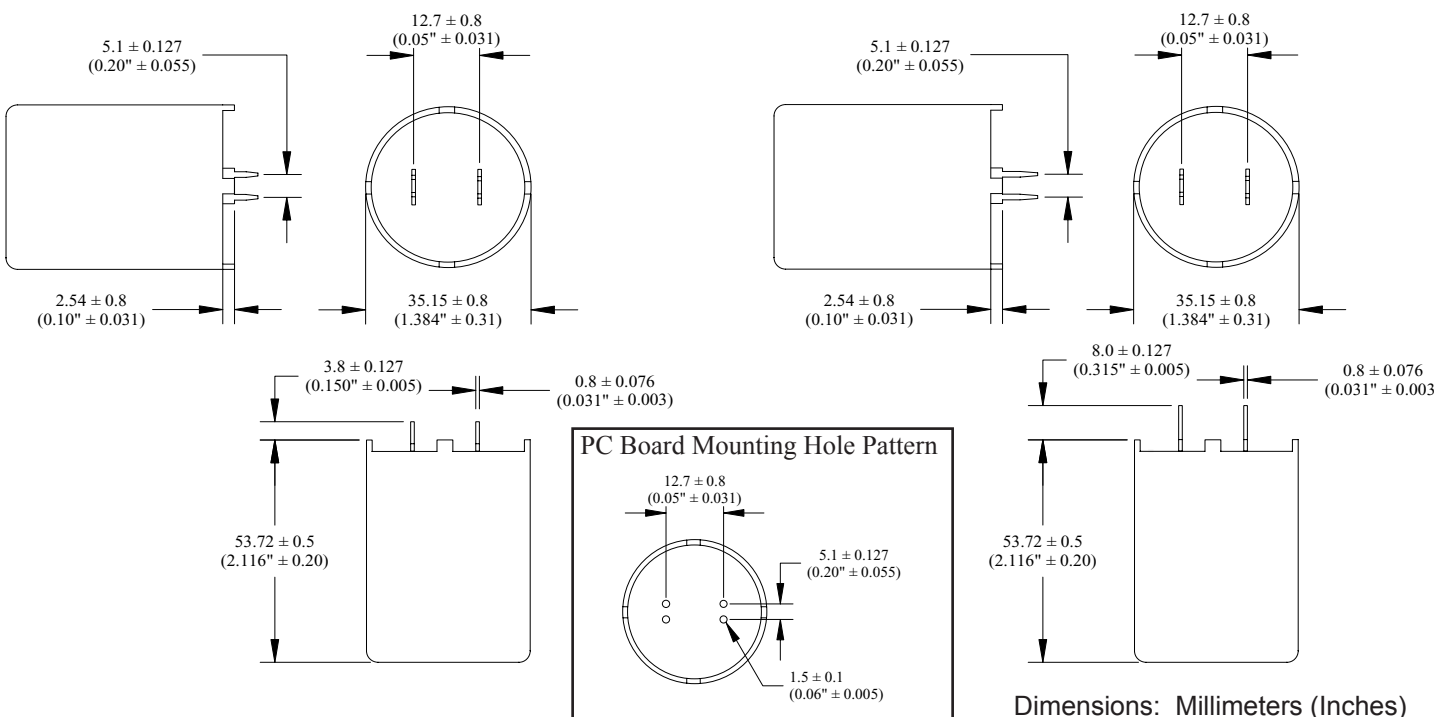
“S” Style (Short Terminal Pins) Optional

Pins are tinned plated brass tapered:  
1.27 mm (0.05") - 1.14 mm (0.045")

标准（长的引针）引针：逐渐减小的镀锡铜线

Standard (Long Terminal Pins)

Pins are tinned plated brass tapered:  
1.27 mm (0.05") - 1.14 mm (0.045")



Dimensions: Millimeters (Inches)

**Type UNL ElectroFilm Metallized Polypropylene Capacitors**

规格

**Ratings****RoHS Compliant**

Catalog 目录规格 Part Number	容量 Cap ( $\mu$ F)	电压 Voltage (Vdc)	等效串 联电阻 ESR @ 100 kHz (m $\Omega$ )	焦耳 Joules (J)	高电压 上升速 dV/dt (V/ $\mu$ s)	Peak 峰值 电流 Current (A)	等效 串联 电感 ESL (nH)	高频 率 SRF (kHz)	纹波电流		
									Ripple Current @ 100 kHz		
									25 °C (Arms)	50 °C (Arms)	75 °C (Arms)
UNL4W30K-F UNL4W30KS-F	30.0	400	6.0	2.4	30.0	900	35	155	24.2	19.4	14.6
UNL5W35K-F UNL5W35KS-F	35.0	500	8.0	4.4	26.0	910	35	144	22.0	18.2	13.0
UNL6W30K-F UNL6W30KS-F	30.0	600	9.0	5.4	30.0	900	35	155	20.7	17.0	12.0
UNL7W20K-F UNL7W20KS-F	20.0	750	10.0	5.6	37.0	740	35	190	19.0	16.0	9.9
UNL8W15K-F UNL8W15KS-F	15.0	800	10.0	4.8	42.0	630	35	219	18.8	15.0	9.8
UNL9W13P5K-F UNL9W13P5KS-F	13.5	900	10.5	5.5	43.0	580	35	231	18.0	14.5	9.6
UNL10W10K-F UNL10W10KS-F	10.0	1000	12.0	5.0	50.0	500	35	269	17.5	13.7	9.0
UNL12W7P5K-F UNL12W7P5KS-F	7.5	1200	13.5	5.4	60.0	450	35	310	16.0	12.0	8.4