

# UNITED CHEMI-CON NPCAP™ Polymer Aluminum Capacitors



## UCC SMD SOLID POLYMER ALUMINUM CAPACITORS

RoHS Compliant This product is RoHS compliant.

### PXH NPCAP™ Series, 125°C

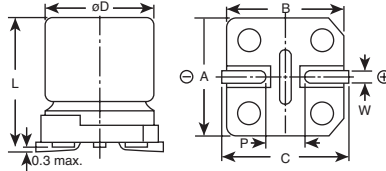
The PXH series are suitable for DC-DC converters, voltage regulators and decoupling applications.

#### Specifications:

- Operating temperature: -55°C to +125°C
- Voltage range: 2.5VDC to 20VDC
- Capacitance range: 22µF to 1000µF
- Capacitance tolerance: ±20%
- Rated lifetime: 1000 hours @ 125°C

#### Features:

- Solid polymer electrolyte
- Ultra low ESR
- Lead free design
- Solvent proof
- High heat resistance to reflow soldering



Case Dimensions: mm								
Case Code	oD	L	A	B	C	W	P	
F60	ø6.3	5.7	6.6	6.6	7.2	0.5-0.8	1.9	
H70	ø8	6.7	8.3	8.3	9.0	0.7-1.1	3.1	
J80	ø10	7.7	10.3	10.3	11.0	0.7-1.1	4.5	
E60	ø5	5.7	5.3	5.3	5.9	0.5-0.8	1.4	
F60	ø6.3	5.7	6.6	6.6	7.2	0.5-0.8	1.9	
H70	ø8	6.7	8.3	8.3	9.0	0.7-1.1	3.1	

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	United Chemi-Con Part No.	Value (µF)	Case Code	Max ESR (MΩ)@20°C 100k-300kHz	Price Each		
					1	10	50
<b>2.5 Volts</b>							
661-PXH2.5V221M	APXH2R5ARA221MF60G	220	F60	35	1.39	1.14	1.02
661-PXH2.5V561M	APXH2R5ARA561MH70G	560	H70	30	2.10	1.72	1.55
<b>4.0 Volts</b>							
661-PXH4V151M	APXH4R0ARA151MF60G	150	F60	35	1.39	1.14	1.02
661-PXH4V221M	APXH4R0ARA221MH70G	220	H70	30	2.09	1.71	1.54
<b>6.3 Volts</b>							
661-PXH6.3V820M	APXH6R3ARA820MF60G	82	F60	40	1.38	1.13	1.02
661-PXH6.3V101M	APXH6R3ARA101MF60G	100	F60	40	1.39	1.14	1.02
661-PXH6.3V151M	APXH6R3ARA151MH70G	150	H70	30	1.60	1.31	1.18
661-PXH6.3V221M	APXH6R3ARA221MH70G	220	H70	30	2.09	1.71	1.54
661-PXH6.3V471M	APXH6R3ARA471MJ80G	470	J80	25	2.55	2.12	2.02
<b>10 Volts</b>							
661-PXH10V121M	APXH100ARA121MH70G	120	H70	35	2.09	1.71	1.54
661-PXH10V151M	APXH100ARA151MH70G	150	H70	35	2.09	1.71	1.54
661-PXH10V331M	APXH100ARA331MJ80G	330	J80	30	2.55	2.11	2.02
<b>16 Volts</b>							
661-PXH16V390M	APXH160ARA390MF60G	39	F60	50	1.39	1.14	1.03
661-PXH16V820M	APXH160ARA820MH70G	82	H70	40	2.07	1.70	1.53
661-PXH16V151M	APXH160ARA151MJ80G	150	J80	35	2.54	2.11	2.01
661-PXH16V181M	APXH160ARA181MJ80G	180	J80	35	2.54	2.11	1.93
<b>20 Volts</b>							
661-PXH20V220M	APXH200ARA220MF60G	22	F60	60	1.44	1.18	1.06
661-PXH20V470M	APXH200ARA470MH70G	47	H70	45	1.96	1.61	1.45
661-PXH20V820M	APXH200ARA820MJ80G	82	J80	45	2.60	2.15	2.06

### PXC NPCAP™ Series, 105°C, Low ESR

#### Specifications:

- Operating temperature: -55°C to +105°C
- Voltage range: 2.5VDC to 16VDC
- Capacitance range: 27µF to 470µF

#### Features:

- Solvent proof
- Cost effective polymer tantalum replacement
- 20 to 30% lower ESR than PXA series
- Designed for two reflow soldering cycles

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	United Chemi-Con Part No.	Value (µF)	Case Code	Max ESR (MΩ)@20°C 100k-300kHz	Price Each		
					1	10	50
<b>2.5 Volt</b>							
661-PXC2.5VC181M	APXC2R5ARA181ME60G	180	E60	30	1.41	1.19	.97
<b>4 Volt</b>							
661-PXC4VC151M	APXC4R0ARA151ME60G	150	E60	30	1.41	1.19	.97
661-PXC4VC221M	APXC4R0ARA221MF60G	220	F60	21	1.44	1.18	1.05
661-PXC4VC331M	APXC4R0ARA331MH70G	330	H70	18	1.98	1.62	1.44
<b>6.3 Volt</b>							
661-PXC6.3VC101M	APXC6R3ARA101ME60G	100	E60	35	1.41	1.19	.97
661-PXC6.3VC181M	APXC6R3ARA181MF60G	180	F60	22	1.44	1.18	1.05
661-PXC6.3VC221M	APXC6R3ARA221MH70G	220	H70	18	1.98	1.62	1.44
<b>10 Volt</b>							
661-PXC10VC56RM	APXC100ARA560ME60G	56	E60	40	1.41	1.20	.97
661-PXC10VC82RM	APXC100ARA820MF60G	82	F60	23	1.44	1.18	1.05
661-PXC10VC151M	APXC100ARA151MH70G	150	H70	20	2.04	1.67	1.47
<b>16 Volt</b>							
661-PXC16VC27RM	APXC160ARA270ME60G	27	E60	45	1.41	1.20	.97
661-PXC16VC39RM	APXC160ARA390MF60G	39	F60	25	1.48	1.21	1.05
661-PXC16VC82RM	APXC160ARA820MH70G	82	H70	25	2.10	1.72	1.54

## UCC PSA NPCAP™ 105°C RADIAL SOLID POLYMER ALUMINUM SERIES, LOW ESR

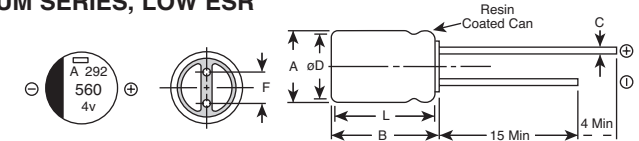
The PSA series uses a solid functional polymer as the electrolyte. This polymer technology insures more stable performance and higher reliability over the expected lifetime than normal liquid electrolyte capacitors. PSA capacitors are constructed of lead-free materials that can withstand high temperature lead-free soldering. This series are suitable for use in DC-DC converters, voltage regulators, and decoupling applications and are recommended replacements for OS-CON™ capacitors.

#### Specifications:

- Temperature range: -55°C to +105°C
- Voltage range: 2.5VDC to 10VDC
- Capacitance range: 27µF to 470µF

#### Features:

- Capacitance tolerance: ± 20%
- Rated lifetime: 2000 hours



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	United Chemi-Con Part No.	Value (µF)	Case Size DxDL (mm)	Case Dimensions: mm					Max ESR (MΩ)@20°C 100k-300kHz	Ripple (mArms) 105°C/100kHz	Price Each					
				oD	L	A	B	oC			F±0.5	1	50	100	500	1000
<b>2.5 Volt</b>																
661-PSA2.5VB680M	APSA2R5ELL681MHB5D	680	8 x 11.5	8	11.5	8+0.5	11.5+1.5	0.8	3.5	7	5580	.71	.66	.58	.49	.40
661-PSA2.5VB820M	APSA2R5ELL821MHB5S	820	8 x 11.5	8	11.5	8+0.5	11.5+1.5	0.8	3.5	7	5580	1.05	.75	.53	.49	.353
<b>4 Volt</b>																
661-PSA4VB560M	APSA4R0ELL561MHB5D	560	8 x 11.5	8	11.5	8+0.5	11.5+1.5	0.8	3.5	7	5580	1.05	.75	.53	.419	.353
<b>6.3 Volt</b>																
661-PSA6.3VB220M	APSA6R3ELL221MFA5G	220	6.3 x 10.5	6.3	9.8	6.3+0.5	9.8+1.0	0.8	2.5	20	3160	.98	.70	.494	.391	.329
661-PSA6.3VB330M	APSA6R3ELL331MFA5G	330	6.3 x 10.5	6.3	9.8	6.3+0.5	9.8+1.0	0.8	2.5	28	3190	1.32	.942	.668	.529	.446
661-PSA6.3VB390M	APSA6R3ELL391MHB5D	390	8 x 11.5	8	11.5	8+0.5	11.5+1.5	0.8	3.5	8	5080	.71	.66	.58	.49	.40
661-PSA6.3VB680M	APSA6R3ELL681MHB5D	680	10 x 11.5	10	11.5	10+0.5	11.5+1.5	0.8	5	7	5860	1.42	1.05	.778	.588	.519
<b>10 Volt</b>																
661-PSA10VB47M	APSA100ELL470MFA5G	47	6.3 x 10.5	6.3	9.8	6.3+0.5	9.8+1.0	0.8	2.5	25	2820	.93	.65	.47	.372	.313
661-PSA10VB68M	APSA100ELL680MFA5G	68	6.3 x 10.5	6.3	9.8	6.3+0.5	9.8+1.0	0.8	2.5	25	2820	.93	.65	.47	.372	.313
661-PSA10VB100M	APSA100ELL101MFA5G	100	6.3 x 10.5	6.3	9.8	6.3+0.5	9.8+1.0	0.8	2.5	25	2820	.98	.70	.496	.393	.331
661-PSA10VB270M	APSA100ELL271MHB5S	270	8 x 11.5	8	11.5	8+0.5	11.5+1.5	0.8	3.5	9	4710	1.10	.75	.556	.44	.371
661-PSA10VB470M	APSA100ELL471MJB5S	470	10 x 11.5	10	11.5	10+0.5	11.5+1.5	0.8	5	8	5650	1.43	1.05	.785	.593	.532

## UCC PSF NPCAP™ 105°C RADIAL SOLID POLYMER ALUMINUM SERIES LOW ESR

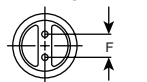
#### Specifications:

- Temperature range: -55°C to +105°C
- Voltage range: 2VDC to 16VDC

#### Features:

- Capacitance tolerance: ± 20%
- Rated lifetime: 5000 hours

F05, F08, H08



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	United Chemi-Con Part No.	Value (µF)	Case Size DxDL (mm)	Case Dimensions: mm					Max ESR (MΩ)@20°C 100k-300kHz	Ripple (mArms) 105°C/100kHz	Price Each					
				oD	L	A	B	oC			F±0.5	1	10	50	500	1000
<b>2 Volt</b>																
661-APSF2R0E102MF08S	APSF2R0ELL102MF08S	1000	6.3 x 8	6.3	8	øD±0.5	8±1.0	0.6	2.5	5	5900	.70	.57	.529	.426	.371
<b>2.5 Volt</b>																
661-APSF2R5E331MF08S	APSF2R5ELL331MF08S	330	6.3 x 8	6.3	8	øD±0.5	8±1.0	0.6	2.5	5	5900	.59	.50	.418	.337	.295
661-APSF2R5E471MF08S	APSF2R5ELL471MF08S	470	6.3 x 8	6.3	8	øD±0.5	8±1.0	0.6	2.5	5	5900	.40	.33	.304	.245	.213
661-APSF2R5E561MF08S	APSF2R5ELL561MF08S	560	6.3 x 8	6.3	8	øD±0.5	8±1.0	0.6	2.5	5	5900	.46	.38	.35	.282	.246
661-APSF2R5E821MF08S	APSF2R5ELL821MF08S	820	6.3 x 8	6.3	8	øD±0.5	8±1.0	0.6	2.5	5	5900	.46	.38	.35	.282	.246
<b>16 Volt</b>																
661-APSF160E101MF05S	APSF160ELL101MF05S	100	6.3 x 5	6.3	5	øD±0.5	5±1.0	0.45	2.5	24	2490	.46	.38	.35	.282	.246
661-APSF160E271MH08S	APSF160ELL271MH08S	270	8 x 8	8	8	øD±0.5	8±1.0	0.6	3.5	10	5000	.70	.58	.532	.428	.373
661-APSF160E331MH08S	APSF160ELL331MH08S	330	8 x 8	8	8	øD±0.5	8±1.0	0.6	3.5	13	4700	.77	.64	.583	.469	.409
661-APSF160E471MHB5S	APSF160ELL471MHB5S	470	8 x 11.5	8	11.5	øD±0.5	11.5±1.5	0.6	5	11	5400	.91	.75	.679	.547	.476