

Production By Country

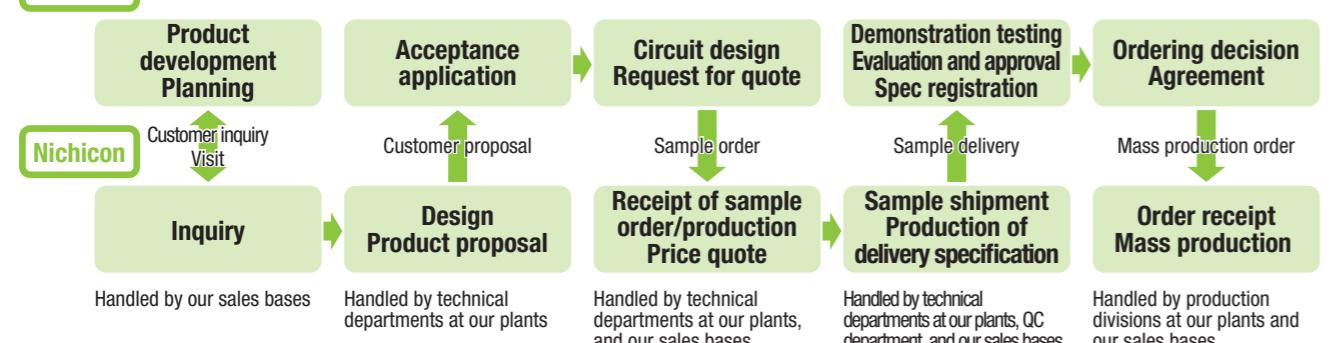
	Snap-in terminal type aluminum electrolytic capacitors	Screw terminal type aluminum electrolytic capacitors	Miniature aluminum electrolytic capacitors	Chip-type aluminum electrolytic capacitors	Electrical double layer capacitors	Conductive polymer aluminum solid electrolytic capacitors	Film capacitors
Japan	●	●	●	●	●	●	●
China	●	●	●	●	●	●	●
Malaysia	●	●	●	●	●	●	●

Note: Please confirm when ordering because some series, sizes and specs are not being produced.

Standard Process for Custom Product Development

We offer products optimized to meet our customers' application, size and other design needs.

Customer



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CAUTION FOR SAFETY

PRIOR TO ORDERING A PRODUCT, PLEASE OBTAIN A COPY OF SPECIFICATION FROM NICHICON AND USE THE SPECIFICATION AS A BASIS WHEN DESIGNING EQUIPMENT AND INCORPORATING OUR PRODUCT. NICHICON ADMITS NO LIABILITY FOR EQUIPMENT PROBLEMS DUE TO THE LACK OF PRODUCT SPECIFICATIONS BEING CONFIRMED.

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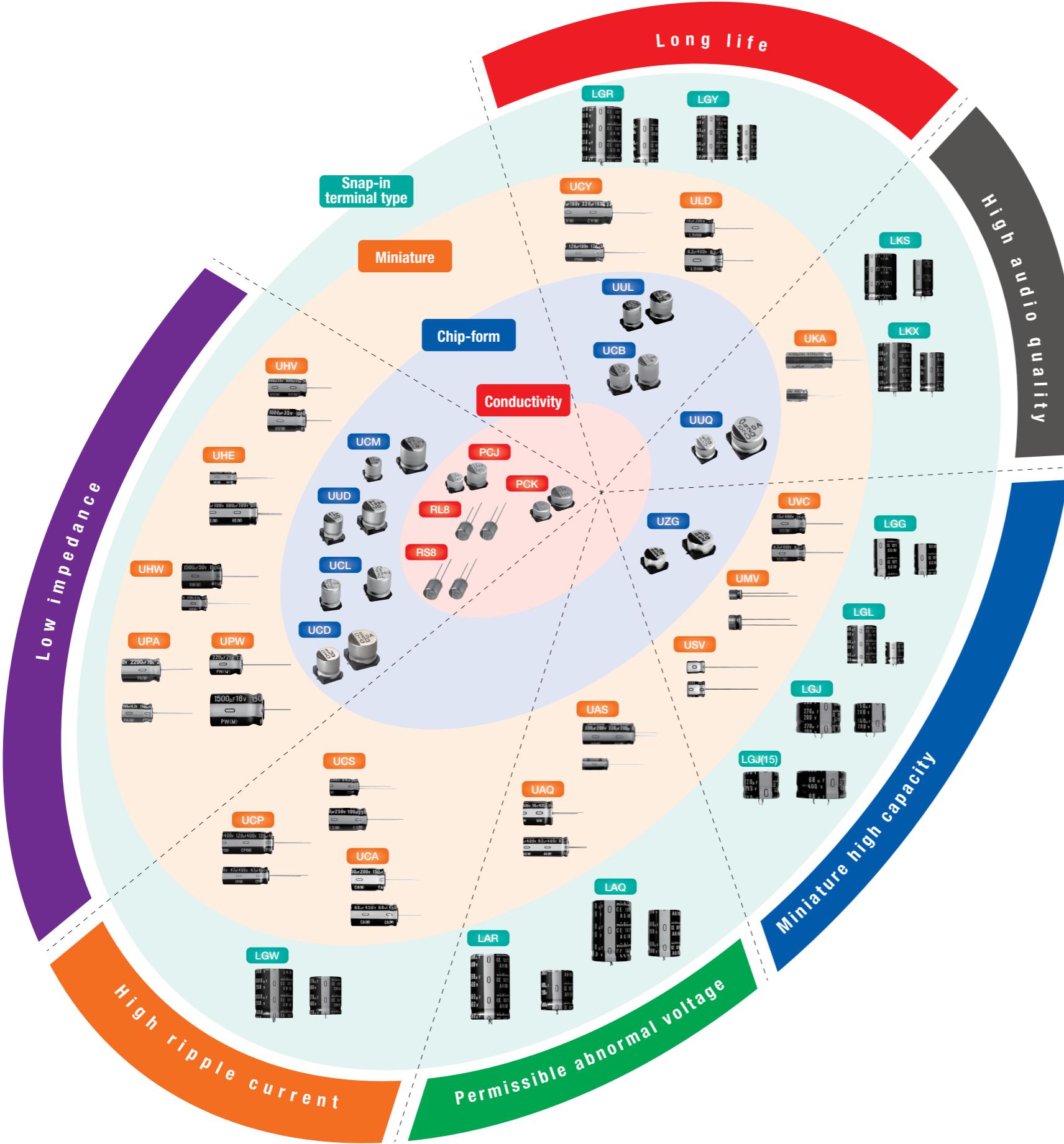
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Nichicon Power Supply and Lighting Applications Catalog

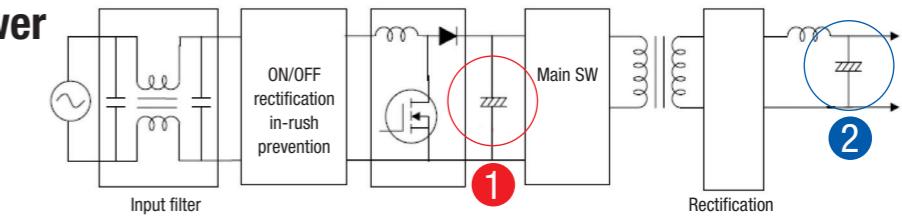
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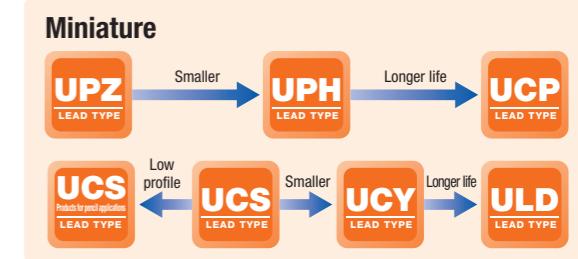
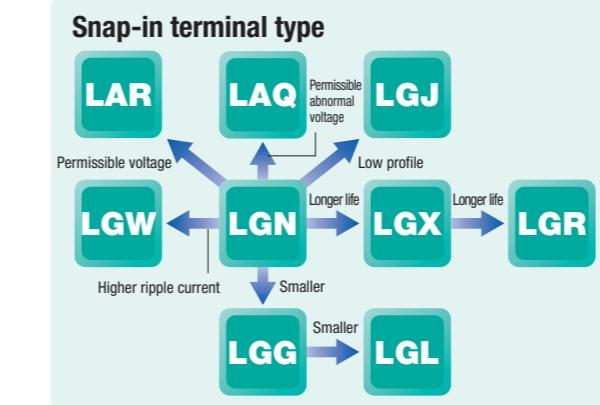
Series recommended for lighting or various power sources



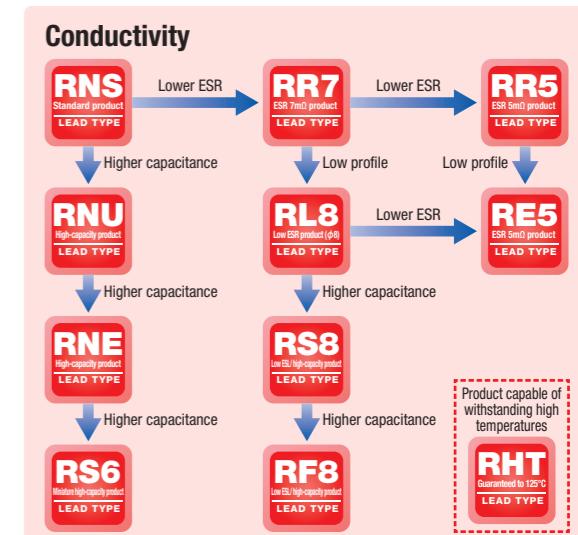
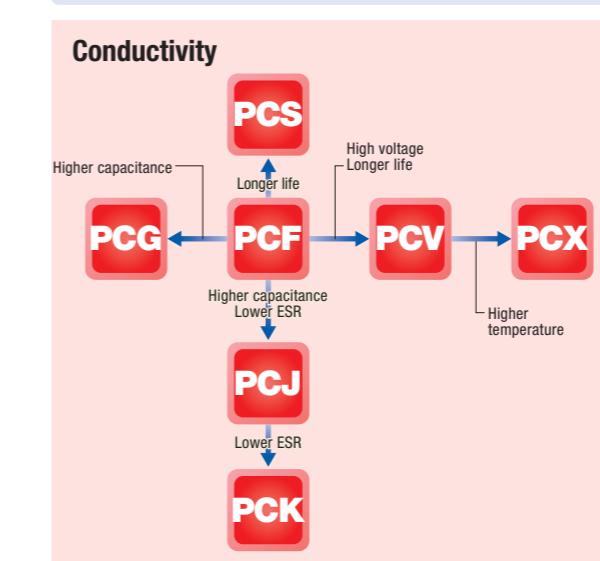
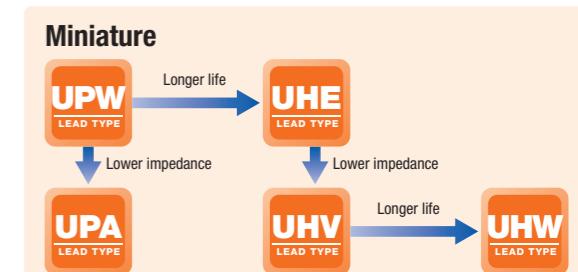
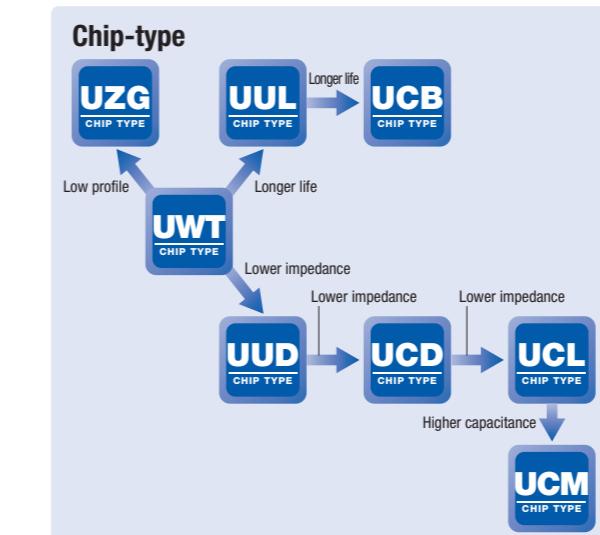
Switching power source circuit



1 System diagram of series recommended for primary power sources



2 System diagram of series recommended for secondary power sources



Long-life

These capacitors can double* the lifespan of LED lighting.

*Reflects only the lifespan of the LED lighting fixture capacitor

Compared to earlier product

ULD	Twice the lifespan	105°C 20,000h
UCY		105°C 10,000h

400V 6.8μF
(ø10×16L)



Spec comparison

LGN	LGX	LGR	Comparison example Rating Voltage:400V Capacitance:330μF
Lifespan Size	3,000 hours ø30×35	5,000 hours ø30×35	10,000 hours ø30×50

LGR Snap-in terminal type 105°C long-life product

- Optimal for power source circuits requiring high reliability
- Products with rated ripple current application guaranteed for 10,000 hours

Product size	ø22×25L to ø35×50L
Endurance	10,000 hours at 105°C
Rated Voltage	200 to 450V
Capacitance	39 to 1,500μF

UCY Miniature high ripple current long-life product

- Supports high ripple current
- Products with rated ripple current application guaranteed for 12,000 hours (Some products 10,000 hours)

Product size	ø10×16L to ø18×46L
Endurance	12,000 hours at 105°C (For 20L or less or 500V rating:10,000 hours)
Rated Voltage	160 to 500V
Capacitance	6.8 to 680μF

UUL Chip-type long-life product

- Surface-mounted long-life product
- Applicable to automatic mounting machine fed with carrier tape

Product size	ø4×5.8L to ø10×10L
Endurance	5,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	0.1 to 1,000μF

LGY Snap-in terminal type 105°C long-life product

- Optimal for power source circuits on industrial equipment requiring high reliability
- Products with rated ripple current application guaranteed for 5,000 hours

Product size	ø22×25L to ø35×50L
Endurance	5,000 hours at 105°C
Rated Voltage	16 to 100V
Capacitance	560 to 47,000μF

ULD Miniature long-life product

- Products with rated ripple current application guaranteed for 20,000 hours (Some products 10,000 hours, 12,000 hours, 15,000 hours)

Product size	ø5×11L to ø18×31.5L
Endurance	20,000 hours at 105°C (ø6.3×11L, ø8×9L, ø10×9L:12,000 hours, ø8×11.5L, ø10×12.5L:15,000 hours, (10 to 100V):10,000 hours)
Rated Voltage	10 to 450V
Capacitance	1 to 330μF

UCB Chip-type long-life product

- Surface-mounted long-life product
- Applicable to automatic mounting machine fed with carrier tape

Product size	ø4×7L to ø10×10L
Endurance	7,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	0.1 to 1,000μF

High audio quality

We combine newly developed audio environment materials with the characteristic power of our products to achieve excellently balanced, powerful sound.

LKS Miniature product for audio equipment power source smoothing

- Effective in improving audio quality by replacing the general miniature product
- Careful selection of high-audio-quality parts

Product size	ø20×25L to ø35×50L
Endurance	1,000 hours at 85°C
Rated Voltage	25 to 100V
Capacitance	680 to 33,000μF

UKA High-grade product over a broad range of temperatures for audio equipment

- High-grade audio product supporting 105 °C
- Careful selection of high-audio-quality parts

Product size	ø5×11L to ø18×40L
Endurance	2,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	22 to 22,000μF

LKX For audio equipment switching power sources

- Effective in improving audio quality by replacing the 105°C standard product
- Careful selection of high-audio-quality parts

Product size	ø20×25L to ø35×50L
Endurance	2,000 hours at 105°C
Rated Voltage	200 to 450V
Capacitance	56 to 2,200μF

UUQ Audio-use chip product for a broad range of temperatures

- Surface-mounted audio product for a broad range of temperatures
- Applicable to automatic mounting machine fed with carrier tape.

Product size	ø4×5.4L to ø10×10L
Endurance	1,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	0.1 to 1,000μF



Miniature high capacity

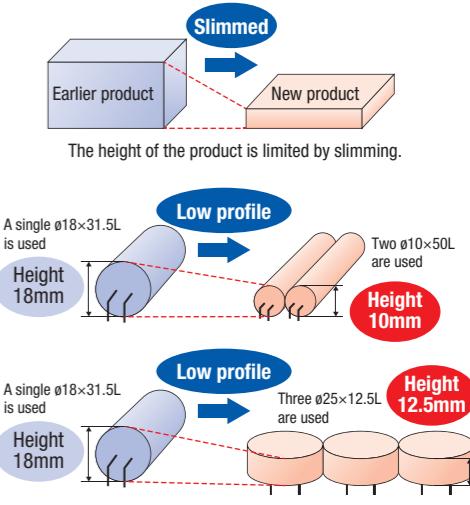
We offer a variety of low-profile products.



Spec comparison

Board mounting height (Nominal+tolerance+valve space)	30mm (25+2+3)	25mm (20+2+3)	21mm (20+1+0)	20mm (15+2+3)
Series name	standard product LGU	standard product LGJ	Sideways-oriented product	Ultra-low-back product LGJ(15)
	VENT	VENT	VENT	VENT
400V 100μF (Rating example)	ø25×25L	ø30×20L	ø20×35L	ø35×15L
Characteristics	105°C standard product	20mm low-back product	Sideways-oriented product	15mm low-back product
Rated voltage range (V)	16 to 450	160 to 450	200 to 400	160 to 400
Rated capacitance range (μF)	47 to 47,000	47 to 680	68 to 1,200	39 to 390
Endurance	105°C 3,000h	105°C 3,000h	105°C 2,000h	105°C 2,000h
Size range (tolerance)	ø22-25-30-35 L (±2)	20-22-25-30-35 25 to 50	20-22-25-30-35 20	20-22-25-30-35 30 to 50
				15

Supports low profile



LGG Snap-in terminal type 105°C ultra-miniature product

- Contributes to product miniaturization
- Products with rated ripple current application guaranteed for 2,000 hours

Product size	ø22×25L to ø35×50L
Endurance	2,000 hours at 105°C
Rated Voltage	160 to 450V
Capacitance	100 to 3,300μF

LGL Snap-in terminal type 105°C ultra-miniature product

- LGG Series miniaturized product
- Long-life products with rated ripple current application guaranteed for 2,000 hours

Product size	ø22×25L to ø35×50L
Endurance	8,000 hours at 105°C
Rated Voltage	400 to 450V
Capacitance	120 to 1,000μF

LGJ Snap-in terminal type 105°C thin product

- Optimal for making power sources lower profile
- Products with rated ripple current application guaranteed for 3,000 hours

Product size	ø20×20L to ø35×20L
Endurance	3,000 hours at 105°C
Rated Voltage	200 to 450V
Capacitance	47 to 680μF

LGJ(15) Snap-in terminal type 105°C thin product (15mmL)

- Optimal for making power sources lower profile
- Products with rated ripple current application guaranteed for 2,000 hours

Product size	ø20×15L to ø35×15L
Endurance	2,000 hours at 105°C
Rated Voltage	160 to 400V
Capacitance	39 to 390μF

UVC Ultra-miniature product for use in adaptors

- Ultra-miniature product for use in adaptors

Product size	ø8×11.5L to ø10×20L
Endurance	2,000 hours at 105°C
Rated Voltage	400V
Capacitance	4.7 to 18μF

UMV 5mmL long-life product

- height 5mmL
- Guaranteed for 5,000 hours at 105°C

Product size	ø4×5L to ø6.3×5L
Endurance	5,000 hours at 105°C
Rated Voltage	4 to 50V
Capacitance	0.1 to 100μF

USV 7mmL long-life product

- height 7mmL
- Guaranteed for 5,000 hours at 105°C

Product size	ø4×7L to ø8×7L
Endurance	5,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	0.1 to 220μF

UZG Chip 3.95mmL MAX broad-temperature-range-product

- Surface-mounted product, height 3.95mmL MAX, broad-temperature-range product
- Applicable to automatic mounting machine fed with carrier tape

Product size	ø4×3.9L to ø6.3×3.9L
Endurance	1,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	0.1 to 100μF

Permissible abnormal voltage

Reduces risk and increases safety when application of overvoltage is anticipated, such as in locations overseas where voltage is unstable.

LAQ	
Snap-in terminal type Miniature product supporting overvoltage at 105°C	
Optimal in products used in areas where power sources are unstable	
Products with rated ripple current application guaranteed for 2,000 hours	
Product size	ø22×25L to ø35×45L
Endurance	2,000 hours at 105°C
Rated Voltage	200 to 400V
Capacitance	33 to 1,500µF
Safety function	In the tests, below the pressure valve operated normally, metal parts did not fly off, and there were no shorts or fires.

LAR	
Snap-in terminal type Miniature product supporting overvoltage at 105°C	
Reduces short occurrence during periods of overvoltage (1.5 times the voltage rating)	
Products with rated ripple current application guaranteed for 2,000 hours	
Product size	ø22×25L to ø35×50L
Endurance	2,000 hours at 105°C
Rated Voltage	200 to 450V
Capacitance	82 to 2,200µF
Safety function	Pressure valve operated normally 60% or more of the time and no shorts or fires occurred during application of DC current at 1.5 times the voltage rating and Note: Current limit during application of overvoltage is 1A

UAQ	
Product supporting abnormal voltage for use in a high temperature range	
Improves safety in regard to DC abnormal overvoltage	
Miniature high ripple current product	
Product size	ø10×20L to ø18×40L
Endurance	2,000 hours at 105°C
Rated Voltage	200 to 400V
Capacitance	10 to 220µF
Safety function	Safety function: In the tests, below the pressure valve operated normally, metal parts did not fly off, and there were no shorts or fires.

UAS	
Miniature product supporting abnormal voltage for use in a high temperature range	
Improves safety in regard to DC abnormal overvoltage	
Miniature high ripple current product	
Product size	ø10×9L to ø18×40L
Endurance	2,000 hours at 105°C
Rated Voltage	200 to 400V
Capacitance	4.7 to 330µF
Safety function	In the tests shown at right, the pressure valve operated normally, metal parts did not fly off, and there were no shorts or fires.

Test conditions (LAQ)			
Voltage (V)	Capacitance (µF)	Current limit	Test voltage
200	Less than 330	4A	DC 300V or 375V
	330 to 469	5A	
	470 +	7A	
220	Less than 330	4A	DC 320V or 405V
	330 to 469	5A	
	470 +	7A	
400	Less than 100	2A	DC 500V or 600V
	100 to 219	4A	
	220 +	7A	

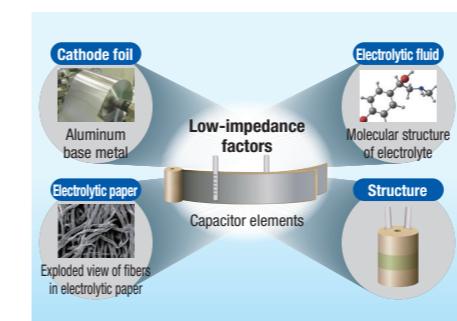
Test conditions (UAQ, UAS)			
Voltage (V)	Test conditions		
	Current limit	Test voltage	
200	4A (330µF is 5A)	DC 300V or 375V	
400	2A (100µF以上は4A)	DC 500V or 600V	



Low-impedance

Greatly reduces impedance, and can support precision products.

- Greater electrode surface area
- Lower loss of electrolytic fluid or electrolytic paper



Saving space	
Series	Spec example
UCD	16v 220µF ø6.3×7.7L 0.32Ω
UCL	16v 220µF ø6.3×7.7L 0.16Ω
UCM	16v 330µF ø6.3×7.7L 0.16Ω

Achieves 25-50% lower impedance than the previous product (UCD Series)
Smaller with higher capacity than the UCL Series
Size reduction makes it possible to improve storage efficiency and save space

UHV	
Low-impedance product for switching power sources	
Broadly cuts high-frequency impedance	
Miniature high ripple current product	
Product size	ø5×11L to ø16×25L
Endurance	6,000 hours at 105°C (ø6.3 or less: 5,000 hours)
Rated Voltage	6.3 to 35V
Capacitance	47 to 8,200µF

UHE	
Miniature low-impedance highly reliable product	
Low-impedance product	
Guaranteed for 4,000 to 10,000 hours at 105°C	
Product size	ø5×11L to ø18×40L
Endurance	4,000 to 10,000 hours at 105°C (ø6.3 to 10V, ø6.3 or less: 4,000 hours, ø8.10: 6,000 hours, ø12.5 or more: 10,000 hours)
Rated Voltage	6.3 to 100V
Capacitance	0.47 to 18,000µF

UHW	
Low-impedance product for switching power sources	
Broadly cuts high-frequency impedance	
Miniature high ripple current product	
Product size	ø10×16L to ø16×35.5L
Endurance	10,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	220 to 15,000µF

UPA	
Miniature ultralow-impedance product for switching power sources	
Impedance even lower than UPW	
Product size	ø8×11.5L to ø18×31.5L
Endurance	5,000 hours at 105°C (ø8: 3,000 hours, ø10: 4,000 hours)
Rated Voltage	6.3 to 35V
Capacitance	180 to 18,000µF

UPW	
Miniature ultralow-impedance product for switching power sources	
Low-impedance product	
Rated ripple current application Guaranteed for 2,000 to 8,000 hours at 105°C	
Product size	ø4×7L to ø25×50L
Endurance	8,000 hours at 105°C (ø4.5, 6.3, 2,000 hours, ø8.3, 10,000 hours, ø12.5, 7,000 hours)
Rated Voltage	6.3 to 450V
Capacitance	0.47 to 15,000µF

UUD	
Chip-type low-impedance product	
Surface-mounted low-impedance product	
Applicable to automatic mounting machine fed with carrier tape	
Product size	ø4×5.8L to ø10×10L
Endurance	2,000 hours at 105°C (ø6.3 or less: 2,000 hours)
Rated Voltage	6.3 to 50V
Capacitance	1 to 1,500µF

UCM	
Chip-type low-impedance product	
Surface-mounted low-impedance product	
Applicable to automatic mounting machine fed with carrier tape	
Product size	ø4×5.8L to ø10×10L
Endurance	2,000 hours at 105°C
Rated Voltage	6.3 to 50V
Capacitance	10 to 2,200µF

UCL	

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