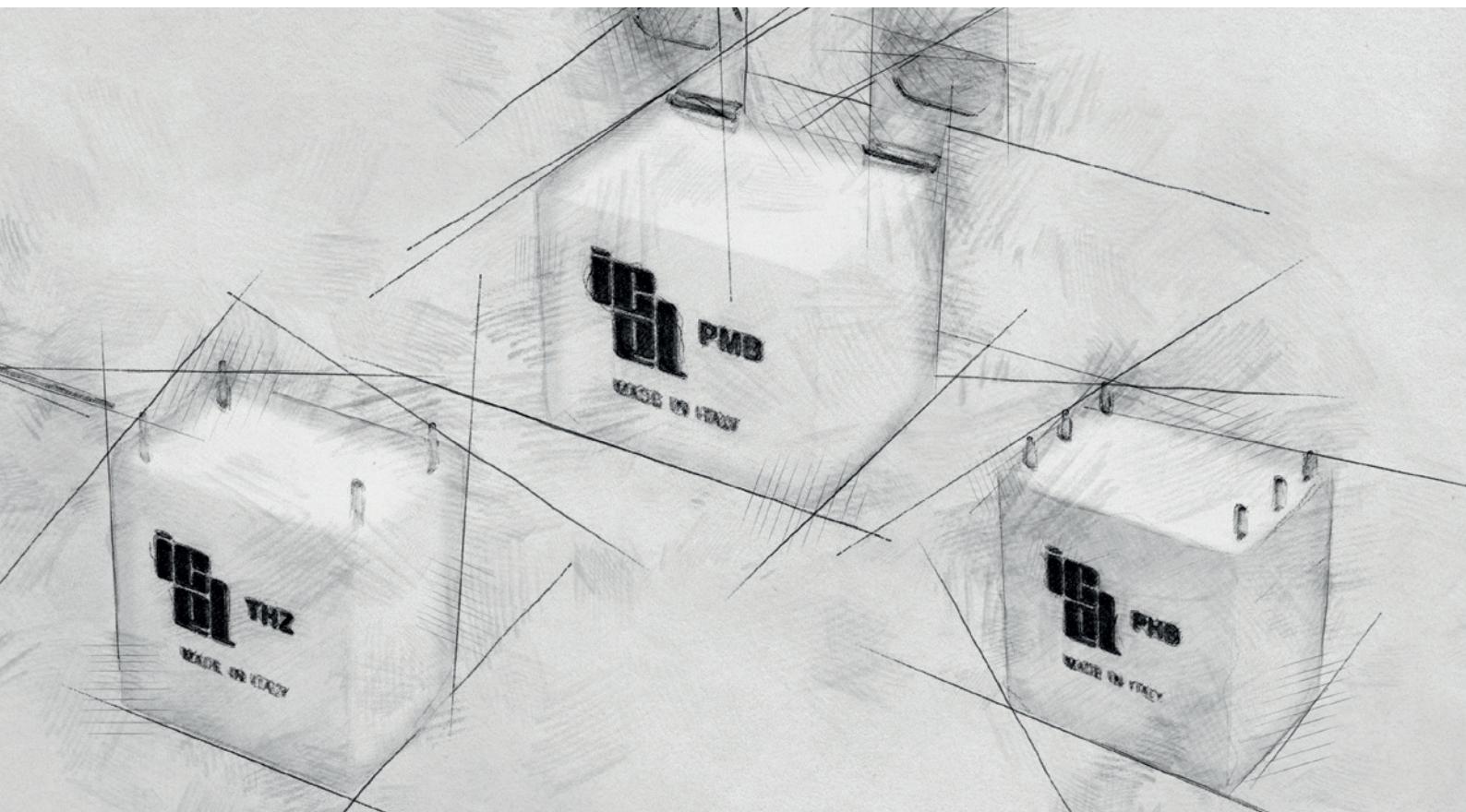
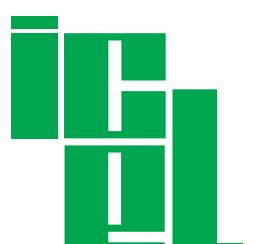


FILM CAPACITORS CATALOGUE

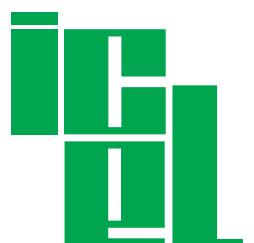


PRODUCT RANGE 2019



FILM CAPACITORS CATALOGUE

PRODUCT RANGE 2019





ICEL PRODUCT RANGE

Polyester film Capacitors

Type	Cn (μ F)	Ur	du/dt (V/ μ s)	Execution	Applications
MTR	0.01 ÷ 150	63 ÷ 1000Vdc (40 ÷ 400Vac)	1 ÷ 80	Axial terminals	General purpose DC applications
MWR - MWF	0.001 ÷ 100	50 ÷ 1500Vdc (30 ÷ 440Vac)	4 ÷ 90	Axial terminals	General purpose DC applications
MWS	0.0015 ÷ 0.56	2.5 ÷ 10kVdc (500 ÷ 1600Vac)	70 ÷ 1200	Axial terminals	High voltage DC applications
MTB	0.022 ÷ 200	63 ÷ 1000Vdc (40 ÷ 400Vac)	0.8 ÷ 40	Radial terminals boxed	General purpose DC applications
MSB	0.01 ÷ 120	63 ÷ 1000Vdc (40 ÷ 400Vac)	4 ÷ 40	Radial terminals boxed	General purpose DC applications High performance

Polypropylene film Capacitors

Type	Cn (μ F)	Ur	du/dt (V/ μ s)	Execution	Applications
PWS	0.001 ÷ 0.56	630 ÷ 2000Vdc (300 ÷ 500Vac)	1800 ÷ 27000	Axial terminals	Snubber High frequency High pulse
MPW - MPF	0.001 ÷ 33	160 ÷ 1500Vdc (90 ÷ 600Vac)	9 ÷ 250	Axial terminals	General purpose DC applications
MPL	0.00475 ÷ 4.7	160 ÷ 630Vdc (90 ÷ 250Vac)	12.5 ÷ 190	Axial terminals	Precision capacitor DC applications
PPR (small size)	0.0022 ÷ 20	250 ÷ 2000Vdc (175 ÷ 700Vac)	105 ÷ 7000	Radial terminals boxed	Snubber High pulse High frequency
PPB	0.001 ÷ 15	250 ÷ 2000Vdc (160 ÷ 700Vac)	170 ÷ 9000	Radial terminals boxed	Snubber / High pulse High frequency High performance
MPH	1 ÷ 30	100 ÷ 400Vdc	10 ÷ 20	Axial lug terminals Axial terminals	Switching High frequency High current
DCB	7.5 ÷ 125	450 ÷ 1100Vdc	7 ÷ 20	Radial terminals boxed	DC-Link Medium-high frequency Medium-high current
PHC	0.1 ÷ 60	250 ÷ 850Vdc (160 ÷ 500Vac)	15 ÷ 375	Axial terminals	Switching High frequency High current
PHB - RHB (small size)	0.1 ÷ 100	250 ÷ 850Vdc (150 ÷ 500Vac)	15 ÷ 375	Radial terminals boxed	Switching High frequency High current
PMC - RMC (small size)	1.2 ÷ 100	250 ÷ 700Vdc (150 ÷ 400Vac)	15 ÷ 72.5	Lug terminals boxed	Switching High frequency High current



ICEL PRODUCT RANGE

Polypropylene film Capacitors

Type	Cn (μ F)	Ur	du/dt (V/ μ s)	Execution	Applications
MHBA	0.47 ÷ 75	370 ÷ 800Vdc (160 ÷ 400Vac)	25 ÷ 120	Radial or Lug terminals boxed	Switching / DC-Link High frequency/current AC applications
MHBS	0.68 ÷ 100	575 ÷ 1275Vdc (240 ÷ 440Vac)	12.5 ÷ 61	Radial or Lug terminals boxed	Switching / DC-Link Medium-high frequency High current AC output filtering
THZ	0.68 ÷ 47	450 ÷ 1040Vdc (240 ÷ 550Vac)	28.5 ÷ 320	Radial terminals boxed	AC applications Harsh environment
PPS	0.0068 ÷ 10	700 ÷ 3000Vdc (420 ÷ 750Vac)	90 ÷ 1500	Axial terminals	Switching / snubber Medium-high pulse High current
PHS	0.0068 ÷ 18.5	550 ÷ 3000Vdc (340 ÷ 750Vac)	72 ÷ 1500	Radial terminals boxed	Switching / snubber Medium-high pulse High current
PMS	0.068 ÷ 18.5	550 ÷ 3000Vdc (340 ÷ 750Vac)	72 ÷ 750	Lug terminals boxed	Switching / snubber Medium-high pulse High current
PPA	0.0047 ÷ 6.8	700 ÷ 3000Vdc (420 ÷ 750Vac)	300 ÷ 5250	Axial terminals	Snubber / pulse High pulse High current
PSB - RSB (small size)	0.0047 ÷ 12	700 ÷ 3000Vdc (380 ÷ 750Vac)	285 ÷ 6300	Radial terminals boxed	Snubber / pulse High pulse High current
PMB - RMB (small size)	0.047 ÷ 12	700 ÷ 3000Vdc (380 ÷ 750Vac)	285 ÷ 2500	Lug terminals boxed	Snubber / pulse High pulse High current
MAR	0.22 ÷ 60	370 ÷ 800Vdc (160 ÷ 400Vac)	15 ÷ 120	Axial terminals	Switching AC applications Medium-high current
MAB*	0.1 ÷ 40	370 ÷ 1200Vdc (160 ÷ 500Vac)	25 ÷ 175	Radial or Cable terminals boxed	Motor run AC applications

*MABA01 and MABA02 EN60252-1 IMQ approved; all types UL810 construction only approved, execution upon request.

For Quality System UNI EN ISO 9001 certification, products approval information, components updated characteristics, last version specifications, not for new design series specifications, news, general data and additional information please refer to ICEL web site

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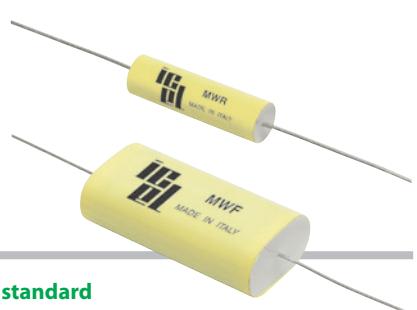
Main applications

- Blocking, filtering, bypassing, timing, coupling, decoupling, general applications in electronics
- Low AC voltage motor running
- Low pulse operation

Execution and reference standard

- Extended metallized film
- Internal series connection for $Ur \geq 1000$ Vdc.
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/2, IEC 60068, RoHS

MTR	Ur	Cn (μ F)	du/dt (V/ μ s)	Nom. size D (mm) x L (mm)
	63 Vdc (40 Vac)	0.68 ÷ 150	1 ÷ 6	5x13 ÷ 30.5x44
	100 Vdc (63 Vac)	0.68 ÷ 120	1 ÷ 9	6x13 ÷ 33.5x44
	250 Vdc (160 Vac)	0.22 ÷ 47	3.5 ÷ 20	6x13 ÷ 33.5x44
	400 Vdc (200 Vac)	0.1 ÷ 22	6 ÷ 30	6x13 ÷ 34.5x44
	630 Vdc (220 Vac)	0.022 ÷ 6.8	8 ÷ 40	5.5x13 ÷ 32.5x44
	1000 Vdc (400 Vac)	0.01 ÷ 3.3	15 ÷ 80	5.5x13 ÷ 32.5x44



Main applications

- Blocking, filtering, bypassing, timing, coupling, decoupling, general applications in electronics
- Low AC voltage motor running
- Low power switching applications
- Low pulse operation

Execution and reference standard

- Extended metallized film
- Internal series connection for $Ur \geq 1000$ Vdc.
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/2, IEC 60068, RoHS

MWR	Ur	Cn (μ F)	du/dt (V/ μ s)	Nom. size D (mm) x L (mm)
	50 Vdc (30 Vac)	1.5 ÷ 10	6 ÷ 9	7x13 ÷ 12x19
	63 Vdc (40 Vac)	0.22 ÷ 100	4 ÷ 11	5x13 ÷ 30.5x44
	100 Vdc (63 Vac)	0.15 ÷ 68	4 ÷ 12	5x13 ÷ 32x44
	250 Vdc (160 Vac)	0.068 ÷ 33	6.5 ÷ 25	4.5x13 ÷ 35x44
	400 Vdc (200 Vac)	0.022 ÷ 10	10 ÷ 40	4.5x13 ÷ 31.5x44
	630 Vdc (220 Vac)	0.01 ÷ 4.7	14 ÷ 60	4.5x13 ÷ 32.5x44
	1000 Vdc (400 Vac)	0.0047 ÷ 2.2	20 ÷ 80	5x13 ÷ 30x44
	1500 Vdc (440 Vac)	0.001 ÷ 1.5	25 ÷ 90	4.5x13 ÷ 31.5x44

MWF	Ur	Cn (μ F)	du/dt (V/ μ s)	Nom. size B (mm) x H (mm) x L (mm)
	63 Vdc (40 Vac)	1.5 ÷ 33	4 ÷ 7	5.5x9.5x19 ÷ 15.5x25.5x32
	100 Vdc (63 Vac)	1 ÷ 47	4 ÷ 9	5x9x19 ÷ 20x30x44
	250 Vdc (160 Vac)	0.47 ÷ 15	6.5 ÷ 18	5.5x10x19 ÷ 18x28x44
	400 Vdc (200 Vac)	0.15 ÷ 6.8	10 ÷ 25	5x9x19 ÷ 20x30x44
	630 Vdc (220 Vac)	0.068 ÷ 3.3	14 ÷ 35	5x9x19 ÷ 21.5x31x44
	1000 Vdc (400 Vac)	0.033 ÷ 1.5	20 ÷ 40	4.5x9.5x19 ÷ 19x29x44
	1500 Vdc (440 Vac)	0.015 ÷ 1	25 ÷ 50	5x9x19 ÷ 20x30x44



Main applications

- High DC voltage applications
- Voltage multipliers
- Medical equipments

Execution and reference standard

- Extended metallized film with internal series connection
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/2, IEC 60068, RoHS

MWS	Ur	Cn (μF)	du/dt (V/ μs)	Nom. size D (mm) x L (mm)
	2500 Vdc (500 Vac)	0.0047 ÷ 0.56	70 ÷ 200	6.5x27 ÷ 38.5x47
	4000 Vdc (750 Vac)	0.0015 ÷ 0.22	175 ÷ 550	6.5x27 ÷ 38.5x44
	6300 Vdc (1200 Vac)	0.0015 ÷ 0.068	400 ÷ 800	8.5x38 ÷ 40x47
	10000 Vdc (1600 Vac)	0.0015 ÷ 0.018	1200	12.5x60 ÷ 40x60



Main applications

- Blocking, filtering, bypassing, timing, coupling, decoupling, general applications in electronics
- Low AC voltage motor running
- Low pulse operation

Execution and reference standard

- Extended metallized film
- Internal series connection for $Ur \geq 1000$ Vdc.
- Box with radial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/2, IEC 60068, RoHS

MTB	Ur	Cn (μF)	du/dt (V/ μs)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	63 Vdc (40 Vac)	0.68 ÷ 200	0.8 ÷ 3	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	100 Vdc (63 Vac)	0.33 ÷ 120	1.2 ÷ 5	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	160 Vdc (90 Vac)	0.33 ÷ 100	2.2 ÷ 9	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	250 Vdc (160 Vac)	0.1 ÷ 56	4 ÷ 12	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	400 Vdc (200 Vac)	0.047 ÷ 27	6.5 ÷ 20	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	630 Vdc (220 Vac)	0.033 ÷ 10	8 ÷ 25	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	1000 Vdc (400 Vac)	0.022 ÷ 4.7	15 ÷ 40	5x11x18 ÷ 35x50x42	15 ÷ 37.5



Main applications

- Blocking, filtering, bypassing, timing, coupling, decoupling, general applications in electronics
- Low AC voltage motor run applications
- Low power switching applications
- Low pulse operation

Execution and reference standard

- Extended metallized film
- Internal series connection for $Ur \geq 1000\text{Vdc}$.
- Box with radial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/2, IEC 60068, RoHS

Ur	Cn (μF)	du/dt (V/ μs)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
63 Vdc (40 Vac)	0.68 ÷ 120	4 ÷ 7	5x11x18 ÷ 35x50x42	15 ÷ 37.5
100 Vdc (63 Vac)	0.33 ÷ 100	4 ÷ 9	5x11x18 ÷ 35x50x42	15 ÷ 37.5
160 Vdc (90 Vac)	0.33 ÷ 56	5 ÷ 12	5x11x18 ÷ 35x50x42	15 ÷ 37.5
250 Vdc (160 Vac)	0.1 ÷ 40	6.5 ÷ 18	5x11x18 ÷ 35x50x42	15 ÷ 37.5
400 Vdc (200 Vac)	0.047 ÷ 15	10 ÷ 25	5x11x18 ÷ 35x50x42	15 ÷ 37.5
630 Vdc (220 Vac)	0.033 ÷ 6.8	14 ÷ 35	5x11x18 ÷ 35x50x42	15 ÷ 37.5
1000 Vdc (400 Vac)	0.01 ÷ 4.7	20 ÷ 40	5x11x18 ÷ 35x50x42	15 ÷ 37.5

MSB



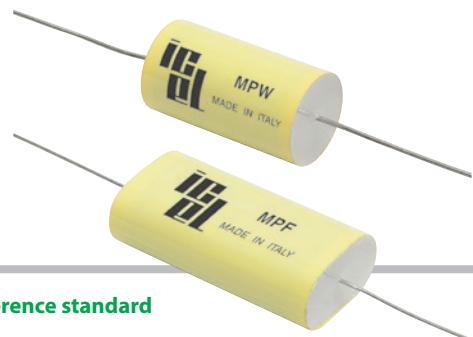
Main applications

- Snubber and SCR commutating circuits in SMPSs
- High voltage, high current and high pulse applications up to very high operation frequencies

Execution and reference standard

- Extended foil with internal series connection and metallized film
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/13, IEC 60068, RoHS

PWS	Ur	Cn (μF)	du/dt (V/ μs)	Nom. size D (mm) x L (mm)
	630 Vdc (300 Vac)	0.015 ÷ 0.56	1800 ÷ 4300	7x19 ÷ 25x32
	1000 Vdc (400 Vac)	0.0033 ÷ 0.22	3700 ÷ 14000	7x19 ÷ 26x32
	1500 Vdc (450 Vac)	0.0022 ÷ 0.12	4500 ÷ 17000	7.5x19 ÷ 25x32
	2000 Vdc (500 Vac)	0.001 ÷ 0.068	7000 ÷ 27000	7.5x19 ÷ 25x32



Main applications

- Blocking, filtering, bypassing, timing, coupling, decoupling, audio applications, general applications in electronics
- Low power switching applications
- Medium-low pulse operation

Execution and reference standard

- Extended metallized film
- Internal series connection for $Ur \geq 1000$ Vdc.
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/16, IEC 60068, RoHS

MPW	Ur	Cn (μF)	du/dt (V/ μs)	Nom. size D (mm) x L (mm)
	160 Vdc (90 Vac)	0.068 ÷ 33	9 ÷ 44	5x13 ÷ 33.5x44
	250 Vdc (200 Vac)	0.022 ÷ 15	11 ÷ 55	5x13 ÷ 34.5x44
	400 Vdc (220 Vac)	0.01 ÷ 6.8	22 ÷ 110	5x13 ÷ 30x44
	630 Vdc (250 Vac)	0.0068 ÷ 4.7	33 ÷ 190	5x13 ÷ 33.5x44
	1000 Vdc (450 Vac)	0.015 ÷ 0.47	70 ÷ 150	8.5x19 ÷ 22x32
	1500 Vdc (600 Vac)	0.001 ÷ 0.33	90 ÷ 250	4.5x13 ÷ 23x32

MPF	Ur	Cn (μF)	du/dt (V/ μs)	Nom. size B (mm) x H (mm) x L (mm)
	160 Vdc (90 Vac)	0.33 ÷ 15	9 ÷ 25	5x9x19 ÷ 18x28x44
	250 Vdc (200 Vac)	0.15 ÷ 6.8	11 ÷ 31	5x9x19 ÷ 18.5x29x44
	400 Vdc (220 Vac)	0.068 ÷ 3.3	22 ÷ 61	5x8x19 ÷ 15x25x44
	630 Vdc (250 Vac)	0.033 ÷ 2.2	33 ÷ 100	5x9x19 ÷ 17.5x27.5x44
	1000 Vdc (450 Vac)	0.047 ÷ 0.33	70 ÷ 82.5	6x10x27 ÷ 13.5x23.5x32
	1500 Vdc (600 Vac)	0.01 ÷ 0.22	90 ÷ 187.5	5x9x19 ÷ 14x23.5x32



Main applications

- Filtering, timing, integrating circuits
- High performance and high precision circuits
- Low pulse operation

Execution and reference standard

- Extended metallized film
- Axial terminals
- Low tolerance execution on Capacitance up to $\pm 1\%$
- UL 94 V-0, flame retardant execution
- IEC 60384/16, IEC 60068, RoHS

MPL	Ur	Cn (μ F)	du/dt (V/ μ s)	Nom. size D (mm) x L (mm)
	160 Vdc (90 Vac)	0.0562 \div 4.7	12.5 \div 44	5x13 \div 16x32
	250 Vdc (200 Vac)	0.0182 \div 3.3	15 \div 55	5x13 \div 20x32
	400 Vdc (220 Vac)	0.00825 \div 1.5	29 \div 110	5x13 \div 18x32
	630 Vdc (250 Vac)	0.00475 \div 1	46 \div 190	5x13 \div 19x32



Main applications

- Snubber, SCR commutating circuits, electronic ballasts, protection circuits in SMPSs
- High voltage, high current and high pulse operation up to very high operating frequencies

Execution and reference standard

- Extended double side metallized carrier film
- Internal series connection and metallized film for $Ur \geq 630$ Vdc.
- Box with radial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/16, IEC 60068, RoHS

PPR	Ur	Cn (μ F)	du/dt (V/ μ s)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	250 Vdc (175 Vac)	0.1 \div 20	105 \div 315	5x11x18 \div 35x50x42	15 \div 37.5
	400 Vdc (230 Vac)	0.047 \div 10	160 \div 480	5x11x18 \div 35x50x42	15 \div 37.5
	630 Vdc (400 Vac)	0.022 \div 4.7	450 \div 2500	5x11x18 \div 35x50x42	15 \div 37.5
	1000 Vdc (600 Vac)	0.01 \div 2.2	500 \div 3300	5x11x18 \div 35x50x42	15 \div 37.5
	1600 Vdc (650 Vac)	0.0033 \div 1.2	1200 \div 6000	5x11x18 \div 35x50x42	15 \div 37.5
	2000 Vdc (700 Vac)	0.0022 \div 0.68	1500 \div 7000	5x11x18 \div 35x50x42	15 \div 37.5



Main applications

- Snubber, SCR commutating circuits, electronic ballasts, protection circuits in SMPSs, defectors circuits in TV sets
- High voltage, high current and high pulse operation up to very high operating frequencies

Execution and reference standard

- Extended double side metallized carrier film
- Internal series connection and metallized film for $Ur \geq 630\text{Vdc}$
- Box with radial terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/16, IEC 60384/17, IEC 60068, RoHS

PPB	Ur	Cn (μF)	du/dt ($\text{V}/\mu\text{s}$)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	250 Vdc (160 Vac)	0.047 ÷ 15	170 ÷ 560	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	400 Vdc (250 Vac)	0.033 ÷ 6.8	280 ÷ 910	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	630 Vdc (400 Vac)	0.01 ÷ 3	950 ÷ 3300	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	1000 Vdc (600 Vac)	0.0033 ÷ 1.8	1200 ÷ 5500	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	1600 Vdc (650 Vac)	0.0022 ÷ 0.82	1700 ÷ 7500	5x11x18 ÷ 35x50x42	15 ÷ 37.5
	2000 Vdc (700 Vac)	0.001 ÷ 0.47	2600 ÷ 9000	5x11x18 ÷ 35x50x42	15 ÷ 37.5



Main applications

- Storage, high frequency, high ripple current applications
- Input and output filtering in SMPSs, resonant circuits, high-end audio applications

Execution and reference standard

- Extended metallized film
- Axial wire or lug terminals
- UL 94 V-0, flame retardant execution
- IEC 60384/16, IEC 60068, RoHS

WIRES	Ur	Cn (μF)	du/dt ($\text{V}/\mu\text{s}$)	Irms max. (A)	Nom. size D (mm) x L (mm)
	100 Vdc	1 ÷ 30	10	4.5 ÷ 11.4	13.4x19 ÷ 30.4x57
	200 Vdc	1 ÷ 20	15	5.4 ÷ 12.8	13x32 ÷ 36.5x57
	400 Vdc	1 ÷ 10	20	7.1 ÷ 14.1	18.1x38 ÷ 42.3x57

LUGS	Ur	Cn (μF)	du/dt ($\text{V}/\mu\text{s}$)	Irms max. (A)	Nom. size D (mm) x L (mm)	Pitch (mm)
	100 Vdc	2 ÷ 30	10	5.8 ÷ 11.9	15.1x29 ÷ 30.4x60	46.45 ÷ 79.75
	200 Vdc	2 ÷ 20	15	7 ÷ 13.4	17.7x36 ÷ 36.5x60	54.35 ÷ 79.75
	400 Vdc	1 ÷ 10	20	7.5 ÷ 14.7	18.1x44 ÷ 42.3x60	60.7 ÷ 79.75



Main applications

- DC capacitor for medium-low power DC-Link applications in inverters
- AC/DC motor controls and welding equipment
- Not suitable for AC applications: refer to MHBA/THZ/MHBS series

Execution and reference standard

- Extended metallized film
- Box with multiple (2 or 4) radial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

DCB	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	450 Vdc	25 ÷ 125	7 ÷ 10	8 ÷ 21.5	22x33.5x42.5 ÷ 38x57.5x57.5	37.5 ÷ 52.5
	700 Vdc	12.5 ÷ 75	10 ÷ 13	7.5 ÷ 20.5	22x30x42.5 ÷ 38x57.5x57.5	37.5 ÷ 52.5
	900 Vdc	10 ÷ 50	11 ÷ 16	7.5 ÷ 20.5	22x33.5x42.5 ÷ 38x57.5x57.5	37.5 ÷ 52.5
	1100 Vdc	7.5 ÷ 35	13 ÷ 20	7 ÷ 18.5	22x33.5x42.5 ÷ 38x57.5x57.5	37.5 ÷ 52.5



Main applications

- Switching capacitor for industrial and motor speed controls
- High frequency electronic ballasts, switching mode power supplies, resonant circuits, induction heaters, high-end audio applications

Execution and reference standard

- Extended metallized film
- Internal series connection for Ur≥850Vdc
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PHC	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size D (mm) x L (mm)
	250 Vdc (160 Vac)	1 ÷ 60	15 ÷ 50	4.5 ÷ 14	9x27 ÷ 38x57
	330 Vdc (220 Vac)	0.68 ÷ 40	20 ÷ 60	4.5 ÷ 14	9x27 ÷ 39x57
	400 Vdc (250 Vac)	0.47 ÷ 25	25 ÷ 75	4 ÷ 14	9x27 ÷ 37x57
	600 Vdc (330 Vac)	0.33 ÷ 15	40 ÷ 95	4 ÷ 14	10x27 ÷ 39x57
	700 Vdc (400 Vac)	0.22 ÷ 10	45 ÷ 135	4 ÷ 14	10.5x27 ÷ 39.5x57
	850 Vdc (500Vac)	0.1 ÷ 6.8	110 ÷ 375	3.5 ÷ 14	9.5x27 ÷ 39.5x57



PHB/RHB



Main applications

- Switching capacitor for industrial and motor speed controls
- High frequency electronic ballasts, switching mode power supplies, resonant circuits, induction heaters, high-end audio applications

Execution and reference standard

- Extended metallized film
- Internal series connection for $Ur \geq 850\text{Vdc}$
- Box with multiple (2, 4 or 6) radial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PHB/RHB	Ur	Cn (μF)	du/dt (V/ μs)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	250 Vdc (150/160 Vac)	1 ÷ 100	15 ÷ 50	4.5 ÷ 34.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	330 Vdc (200/220 Vac)	0.68 ÷ 60	17 ÷ 60	5 ÷ 33	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	400 Vdc (275 Vac)	0.47 ÷ 35	20 ÷ 75	4.5 ÷ 30.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	435 Vdc (260 Vac)	4.7 ÷ 40	32.5 ÷ 70	11 ÷ 27	18x33x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	570 Vdc (330 Vac)	1.5 ÷ 25	43.5 ÷ 95	7 ÷ 29	15x24.5x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	600 Vdc (350 Vac)	0.22 ÷ 20	30 ÷ 95	3.5 ÷ 30.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	675 Vdc (370 Vac)	1.2 ÷ 18.5	50 ÷ 110	6.5 ÷ 28.5	15x24.5x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	700 Vdc (400 Vac)	0.15 ÷ 12.5	40 ÷ 135	4 ÷ 29.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	850 Vdc (500 Vac)	0.1 ÷ 8.2	110 ÷ 375	4 ÷ 36	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5



PMC/RMC



Main applications

- Switching capacitor for resonant circuits, industrial and motor speed controls, induction heaters
- High frequency and high current applications

Execution and reference standard

- Extended metallized film
- Box with lug terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PMC/RMC	Ur	Cn (μF)	du/dt (V/ μs)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)
	250 Vdc (150/160 Vac)	10 ÷ 100	15 ÷ 27.5	12.5 ÷ 37.5	17x28x42.5 ÷ 38x57.5x57.5
	330 Vdc (200/220 Vac)	4.7 ÷ 60	17 ÷ 37.5	11 ÷ 35.5	17x28x42.5 ÷ 38x57.5x57.5
	400 Vdc (275 Vac)	4 ÷ 35	20 ÷ 40	16.5 ÷ 34.5	17x28x42.5 ÷ 38x57.5x57.5
	435 Vdc (270 Vac)	4.7 ÷ 40	32.5 ÷ 47.5	10 ÷ 29	17x28x42.5 ÷ 38x57.5x57.5
	570 Vdc (330 Vac)	2.5 ÷ 25	43.5 ÷ 65	10 ÷ 31.5	17x28x42.5 ÷ 38x57.5x57.5
	600 Vdc (350 Vac)	2.2 ÷ 20	30 ÷ 55	14 ÷ 32.5	17x28x42.5 ÷ 38x57.5x57.5
	675 Vdc (370 Vac)	2.2 ÷ 18	50 ÷ 72.5	10.5 ÷ 30.5	17x28x42.5 ÷ 38x57.5x57.5
	700 Vdc (400 Vac)	1.2 ÷ 12	40 ÷ 70	12 ÷ 31.5	17x28x42.5 ÷ 38x57.5x57.5



Main applications

- Switching capacitor for industrial and motor speed controls, high frequency electronic ballasts, switching mode power supplies, resonant circuits, induction heaters
- Input-output AC filtering
- AC applications

Execution and reference standard

- Extended metallized film
- Box with multiple (2, 4 or 6) radial or lug terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS



MHBA	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
370 Vdc (160 Vac)	3 ÷ 75	25 ÷ 55	5 ÷ 31.5	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
500 Vdc (250 Vac)	1.5 ÷ 55	32.5 ÷ 70	4.5 ÷ 30	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
600 Vdc (330 Vac)	1.2 ÷ 33	40 ÷ 90	5 ÷ 29	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
700 Vdc (380 Vac)	0.68 ÷ 25	50 ÷ 110	3.5 ÷ 27	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
800 Vdc (400 Vac)	0.47 ÷ 20	55 ÷ 120	3 ÷ 26	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	



Main applications

- DC-Link
- Switching capacitor for industrial and motor speed controls, SMPS, solar inverters, power converters and UPS
- AC output filtering (not for input filtering)
- Suitable for AC (not for across the line) applications with restrictions: please refer to MHBA and THZ
- High voltage and high capacitance in small size with long life expectancy,
- High current and high frequency operation capability

Execution and reference standard

- Extended metallized film
- Box with multiple (2, 4 or 6) radial or lug terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS



MHBS	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
575 Vdc (240 Vac)	3 ÷ 100	12.5 ÷ 27	4 ÷ 27.5	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
700 Vdc (285 Vac)	2.2 ÷ 80	14.5 ÷ 31	4 ÷ 28.5	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
800 Vdc (315 Vac)	2 ÷ 65	16.5 ÷ 36	4 ÷ 28.5	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
900 Vdc (350 Vac)	2.2 ÷ 50	18.5 ÷ 41.5	5 ÷ 28.5	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
1000 Vdc (400 Vac)	1.2 ÷ 40	21 ÷ 47	3.5 ÷ 27.5	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
1100 Vdc (420 Vac)	1 ÷ 35	23 ÷ 50	3.5 ÷ 27	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	
1275 Vdc (440 Vac)	0.68 ÷ 25	28 ÷ 61	4 ÷ 26	11x20x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5	



Main applications

- AC power applications
- Input-output AC filtering
- Harsh environment applications

Execution and reference standard

- Extended metallized film
- Internal series connection for Ur>300Vac
- Box with multiple (2, 4 or 6) radial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, AEC Q-200, RoHS

	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
THZ	450 Vdc (240 Vac)	3 ÷ 47	28.5 ÷ 62.5	7 ÷ 27	14x28x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	550 Vdc (300 Vac)	2.2 ÷ 33	36.5 ÷ 82.5	7 ÷ 27	14x28x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	630 Vdc (340 Vac)	1.5 ÷ 22	82.5 ÷ 182.5	7.5 ÷ 29	14x28x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	720 Vdc (400 Vac)	1 ÷ 17.5	97 ÷ 220	7.5 ÷ 28.5	14x28x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	800 Vdc (440 Vac)	1 ÷ 14	105 ÷ 235	7.5 ÷ 29	18x33x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	900 Vdc (475 Vac)	0.68 ÷ 12	120 ÷ 272.5	7 ÷ 29	14x28x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5
	1040 Vdc (550 Vac)	0.68 ÷ 9	135 ÷ 320	8 ÷ 27	18x33x32 ÷ 38x57.5x57.5	27.5 ÷ 52.5



Main applications

- Switching-Snubber
- Energy conversion and control in power semiconductor circuits, industrial and motor speed controls, SMPS, induction heaters
- High voltage, high current and medium-high pulse applications

Execution and reference standard

- Extended metallized film with internal series connection
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size D (mm) x L (mm)
PPS	700 Vdc (420 Vac)	0.15 ÷ 10	90 ÷ 235	3.5 ÷ 14	9.5x27 ÷ 39.5x57
	850 Vdc (500 Vac)	0.1 ÷ 6.8	110 ÷ 375	3.5 ÷ 14	9.5x27 ÷ 39.5x57
	1000 Vdc (525 Vac)	0.068 ÷ 4.7	135 ÷ 425	3 ÷ 14	9.5x27 ÷ 38.5x57
	1200 Vdc (550 Vac)	0.047 ÷ 3.3	150 ÷ 480	2.5 ÷ 14	9x27 ÷ 37x57
	1500 Vdc (600 Vac)	0.033 ÷ 2.2	175 ÷ 610	2.5 ÷ 14	9.5x27 ÷ 38x57
	2000 Vdc (650 Vac)	0.022 ÷ 1.5	225 ÷ 810	2.5 ÷ 14	10x27 ÷ 39.5x57
	2500 Vdc (700 Vac)	0.01 ÷ 1	280 ÷ 1050	1.5 ÷ 14	9.5x27 ÷ 40x57
	3000 Vdc (750 Vac)	0.0068 ÷ 0.56	370 ÷ 1500	1 ÷ 14	10x27 ÷ 40x57



Main applications

- Switching-Snubber
- Energy conversion and control in power semiconductor circuits, resonant circuits, industrial and motor speed controls, SMPS, induction heaters
- High voltage, high current and medium-high pulse applications

Execution and reference standard

- Extended metallized film with internal series connection
- Box with multiple (2, 4 or 6) radial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PHS	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	550 Vdc (340 Vac)	0.22 \div 18.5	72 \div 205	4.5 \div 37	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	700 Vdc (420 Vac)	0.15 \div 12.5	100 \div 250	4.5 \div 36.5	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	850 Vdc (500 Vac)	0.1 \div 8.2	110 \div 375	4 \div 36	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	1000 Vdc (575 Vac)	0.068 \div 6.3	135 \div 425	3.5 \div 35	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	1200 Vdc (630 Vac)	0.047 \div 4.7	150 \div 485	3 \div 34.5	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	1500 Vdc (650 Vac)	0.033 \div 3	175 \div 610	2.5 \div 33	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	2000 Vdc (700 Vac)	0.015 \div 2	225 \div 810	2 \div 31	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	2500 Vdc (725 Vac)	0.01 \div 1.25	280 \div 1050	1.5 \div 28.5	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5
	3000 Vdc (750 Vac)	0.0068 \div 0.68	370 \div 1500	1.5 \div 26.5	7x16x26.5 \div 38x57.5x57.5	22.5 \div 52.5



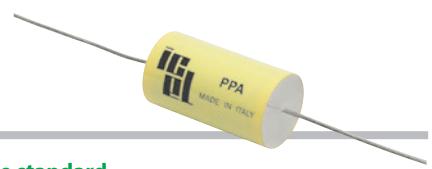
Main applications

- Switching-Snubber capacitor for resonant circuits, industrial and motor speed controls, induction heaters
- High frequency and high current applications

Execution and reference standard

- Extended metallized film with internal series connection
- Box with lug terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PMS	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size D (mm) x L (mm)
	550 Vdc (340 Vac)	2 \div 18.5	72 \div 110	13 \div 38	17x28x42.5 \div 38x57.5x57.5
	700 Vdc (420 Vac)	1.5 \div 12	100 \div 150	15 \div 37	17x28x42.5 \div 38x57.5x57.5
	850 Vdc (500 Vac)	1 \div 8	110 \div 200	14.5 \div 36.5	17x28x42.5 \div 38x57.5x57.5
	1000 Vdc (575 Vac)	0.68 \div 6	135 \div 225	14 \div 36	17x28x42.5 \div 38x57.5x57.5
	1200 Vdc (630 Vac)	0.47 \div 4.7	150 \div 255	12.5 \div 35.5	17x28x42.5 \div 38x57.5x57.5
	1500 Vdc (650 Vac)	0.33 \div 3	175 \div 320	12 \div 34	17x28x42.5 \div 38x57.5x57.5
	2000 Vdc (700 Vac)	0.22 \div 2	225 \div 410	11.5 \div 32	17x28x42.5 \div 38x57.5x57.5
	2500 Vdc (725 Vac)	0.1 \div 1.2	280 \div 550	8 \div 29.5	17x28x42.5 \div 38x57.5x57.5
	3000 Vdc (750 Vac)	0.068 \div 0.68	370 \div 750	8 \div 27	17x28x42.5 \div 38x57.5x57.5



Main applications

- Snubber capacitor for energy conversion and control in power semiconductor circuits, protection circuits in SMPSs, induction heaters
- High voltage, high current and high pulse applications

Execution and reference standard

- Extended double side metallized carrier film with internal series connection and metallized film
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PPA	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size D (mm) x L (mm)
	700 Vdc (420 Vac)	0.1 ÷ 6.8	300 ÷ 950	3.5 ÷ 14	10x27 ÷ 40x57
	850 Vdc (500 Vac)	0.068 ÷ 4.7	375 ÷ 1200	3.5 ÷ 14	9.5x27 ÷ 39.5x57
	1000 Vdc (525 Vac)	0.047 ÷ 3.3	425 ÷ 1400	2.5 ÷ 14	8.5x27 ÷ 38x57
	1200 Vdc (550 Vac)	0.033 ÷ 3	500 ÷ 1600	2 ÷ 14	8.5x27 ÷ 40x57
	1500 Vdc (600 Vac)	0.022 ÷ 2	625 ÷ 2000	2 ÷ 14	8.5x27 ÷ 40x57
	2000 Vdc (650 Vac)	0.015 ÷ 1.2	800 ÷ 2750	2 ÷ 14	9x27 ÷ 38.5x57
	2500 Vdc (700 Vac)	0.01 ÷ 0.82	925 ÷ 3900	1.5 ÷ 14	9.5x27 ÷ 39.5x57
	3000 Vdc (750 Vac)	0.0047 ÷ 0.47	1275 ÷ 5250	1 ÷ 14	9x27 ÷ 39x57



Main applications

- Snubber capacitor for energy conversion and control in power semiconductor circuits, resonant circuits, protection circuits in SMPSs, induction heaters
- High voltage, high current and high pulse applications

Execution and reference standard

- Extended double side metallized carrier film with internal series connection and metallized film
- Box with multiple (2, 4 or 6) radial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PSB/RSB	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	700 Vdc (380/420 Vac)	0.1 ÷ 12	285 ÷ 1200	4 ÷ 38	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	850 Vdc (500 Vac)	0.068 ÷ 8	360 ÷ 1550	4 ÷ 38	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	1000 Vdc (575 Vac)	0.047 ÷ 6	450 ÷ 1800	3.5 ÷ 37.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	1200 Vdc (630 Vac)	0.033 ÷ 4.7	500 ÷ 2000	3 ÷ 37.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	1500 Vdc (650 Vac)	0.022 ÷ 3.3	575 ÷ 2500	2.5 ÷ 32.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	2000 Vdc (700 Vac)	0.015 ÷ 2.2	725 ÷ 3600	2 ÷ 34.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	2500 Vdc (725 Vac)	0.0068 ÷ 1.5	930 ÷ 4900	1.5 ÷ 30.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5
	3000 Vdc (750 Vac)	0.0047 ÷ 1	1150 ÷ 6300	1.5 ÷ 27.5	7x16x26.5 ÷ 38x57.5x57.5	22.5 ÷ 52.5



PMB/RMB



Main applications

- Snubber capacitor for energy conversion and control in power semiconductor circuits, IGBT modules protection and SMPS protection circuits, resonant circuits
- High voltage, high current and high pulse applications

Execution and reference standard

- Extended double side metallized carrier film with internal series connection and metallized film
- Box with lug terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, RoHS

PMB/RMB	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size B (mm) x H (mm) x L (mm)
700 Vdc (380/420 Vac)	1 ÷ 12	285 ÷ 600	13.5 ÷ 39.5	17x28x42.5 ÷ 38x57.5x57.5	
850 Vdc (500 Vac)	0.68 ÷ 8	360 ÷ 750	13.5 ÷ 39.5	17x28x42.5 ÷ 38x57.5x57.5	
1000 Vdc (575 Vac)	0.47 ÷ 6	450 ÷ 870	13.5 ÷ 38.5	17x28x42.5 ÷ 38x57.5x57.5	
1200 Vdc (630 Vac)	0.33 ÷ 4.7	500 ÷ 1000	12 ÷ 38.5	17x28x42.5 ÷ 38x57.5x57.5	
1500 Vdc (650 Vac)	0.22 ÷ 3.3	575 ÷ 1220	12 ÷ 34.5	17x28x42.5 ÷ 38x57.5x57.5	
2000 Vdc (700 Vac)	0.1 ÷ 2.2	725 ÷ 1600	8.5 ÷ 35	17x28x42.5 ÷ 38x57.5x57.5	
2500 Vdc (725 Vac)	0.1 ÷ 1.5	930 ÷ 2050	9 ÷ 32	17x28x42.5 ÷ 38x57.5x57.5	
3000 Vdc (750 Vac)	0.047 ÷ 1	1150 ÷ 2500	7 ÷ 29	17x28x42.5 ÷ 38x57.5x57.5	



MAR



Main applications

- General purpose capacitor for AC applications, motor run
- Switching capacitor for industrial and motor speed controls, electronic ballasts and SMPS

Execution and reference standard

- Extended metallized film
- Axial terminals
- UL 94 V-0, flame retardant execution
- IEC 61071, IEC 60068, EN60252-1, RoHS

MAR	Ur	Cn (μ F)	du/dt (V/ μ s)	Irms max. (A)	Nom. size D (mm) x L (mm)
370 Vdc (160 Vac)	1 ÷ 60	15 ÷ 50	2.5 ÷ 14	9x27 ÷ 38x57	
500 Vdc (275 Vac)	0.68 ÷ 40	20 ÷ 60	2.5 ÷ 14	9x27 ÷ 39x57	
600 Vdc (320 Vac)	0.33 ÷ 25	25 ÷ 90	2 ÷ 14	8x27 ÷ 37x57	
700 Vdc (400 Vac)	0.33 ÷ 20	35 ÷ 105	2.5 ÷ 14	9.5x27 ÷ 39.5x57	
800 Vdc (400 Vac)	0.22 ÷ 15	40 ÷ 120	2 ÷ 14	9x27 ÷ 39x57	



Main applications

- Motor run capacitor
- General purpose AC applications
- Medium-low power switching capacitor for industrial and motor speed controls, electronic ballasts and SMPS

Execution and reference standard

- Extended metallized film
- Box with radial terminals
- UL 94 V-1, UL 94 V-0, flame retardant execution
- IMQ approved series
- IEC 60068, EN 60252-1 (2011)+ A1 (2013), SEV1029, CSA 22.2 n.190 and UL810 (construction only), IEC 60335-1, RoHS

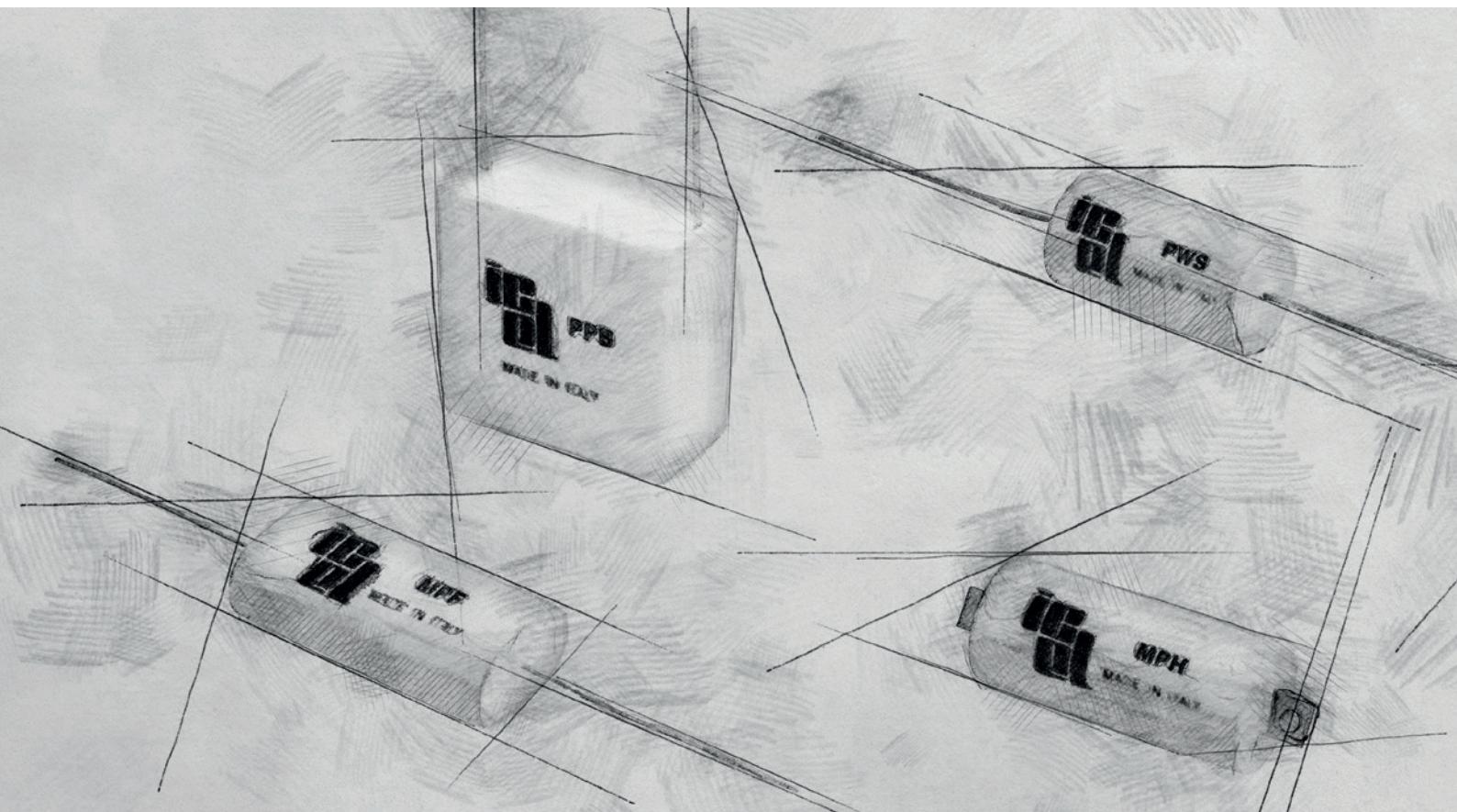
MAB	Ur	Cn (μF)	du/dt (V/μs)	Nom. size B (mm) x H (mm) x L (mm)	Pitch (mm)
	370 Vdc (160 Vac)	1 ÷ 40	25 ÷ 50	7x16x26.5 ÷ 35x50x42	22.5 ÷ 37.5
	500 Vdc (250 Vac)	0.68 ÷ 27	35 ÷ 60	7x16x26.5 ÷ 35x50x42	22.5 ÷ 37.5
	600 Vdc (320 Vac)	0.33 ÷ 18	50 ÷ 90	7x16x26.5 ÷ 35x50x42	22.5 ÷ 37.5
	800 Vdc (400 Vac)	0.1 ÷ 10	65 ÷ 120	7x16x26.5 ÷ 35x50x42	22.5 ÷ 37.5
	1200 Vdc (500 Vac)	0.1 ÷ 4.3	90 ÷ 175	7x16x26.5 ÷ 35x50x42	22.5 ÷ 37.5



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