



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Main applications

MHBS: DC-Link, medium-high freq. switching capacitor for industrial and motor speed controls, SMPS, solar inverters, power converters and UPS; **not for new AC design**, refer to **MHBM** (or MHBA, THZ)

MHBM: DC-Link, medium-high freq. switching capacitor for industrial and motor speed controls, SMPS, solar inverters, power converters and UPS, **also suitable for AC/ output AC filtering (not for across the line) applications**

Main characteristic

High voltage and high capacitance in small size with long life expectancy, high current and high frequency operation capability

Dielectric

Polypropylene

Electrodes

Vacuum deposited metal layers

Coating

Solvent resistant plastic case with resin sealing (UL 94 V-0). Flame retardant execution

Construction

MHBS: extended metallized film (refer to General Technical Information).

Note: with the present specification, ratings have been updated without any modification of the design, material and construction

MHBM: extended metallized film with segmented pattern (refer to General Technical Information). New execution that guarantees a higher safety level

Terminals

Tinned copper wire (lead-free). 2, 4 or 6x terminals or tinned copper (brass) lug terminals (lead-free) execution (please refer to article table)

Degree of protection

IP00

Installation

Whatever position assuring correct heat dissipation. Arrangement of many components with box walls in contact not admitted; suggested minimum distance between side by side elements $\geq 1/8$ of the box thickness (B size). Box with lugs terminals must be free to correctly dissipate from all the body faces

Reference standard

IEC 61071, IEC 60068, RoHS compliant

Climatic category

40/85/56 (IEC 60068/1), GPD (DIN40040)

Please refer also to paragraph C10 (humid ambient) of the General Technical Information

Operating temperature range (case)

-40°...+85°C (+100°C observing voltage and current de-rating)

Max. permissible ambient temperature (operation at rated power, rated current and natural cooling)

+70°C (+85°C observing voltage and current de-rating); at Tamb > +95°C superimposed Irms not admitted (Irms= 0 at Tamb> +95°C)

Nominal Capacitance (Cn) μ F

MHBS: 0,68 μ F to 130 μ F; **MHBM:** 0,68 μ F to 120 μ F; Refer to article table

Capacitance tolerance (at 1kHz)

$\pm 10\%$ (code=K), $\pm 5\%$ (code=J). Other tolerances upon request

Capacitance temperature coefficient

Refer to General Technical Information

Long term stability (at 1kHz)

Capacitance variation $\leq \pm 1\%$ after a period of 2 years at standard environmental conditions

Rated voltage (Ur) (Vdc) at T = +85°C, case (continuous operation)

575, 700, 800, 900, 1000, 1100, 1275 Vdc

Temperature de-rated voltage and current

For operating temperature (case)> +85°C, Ur, Urms, Upkr and Upk must be decreased 1.5% for every °C exceeding +85°C. For current de-rating please also refer to the $\Delta T/T_{amb}$ data in function of the applied Irms listed in the article table

Permissible AC voltage (Urms) (Vac) at T = +85°C, case (continuous operation)

MHBS: not applicable

MHBM: 230, 275, 300, 330, 380, 400, 415 Vac, not for across the line applications

Max. admissible voltage at T = +70°C, case (continuous operation)

MHBS: 630, 770, 880, 1000, 1100, 1200, 1400 Vdc

MHBM: not applicable, please refer to Ur

Max. applicable peak to peak ripple voltage (Upp)

MHBS: 0,2 x Ur (respecting current ratings)

Max. repetitive peak voltage (Upkr), total max 1 hour/day

Up to case T = +85°C max.

660, 805, 920, 1035, 1150, 1265, 1465 Vdc

Up to case T = +70°C max.

MHBS: 720, 885, 1010, 1150, 1265, 1380, 1610 Vdc

MHBM: not applicable, please refer to Upkr @85°C

Non recurrent surge voltage (Upk)

Up to case T = +85°C max.

750, 910, 1040, 1170, 1300, 1430, 1655 Vdc

Up to case T = +70°C max.

MHBS: 815, 1000, 1140, 1300, 1430, 1560, 1820 Vdc

MHBM: not applicable, please refer to Upk @85°C

Self inductance

≤ 1 nH/mm of fixing pitch

Maximum pulse rise time V/ μ s

Refer to article table

Maximum peak current (Ipeak)

Refer to article table. Max. non repetitive Ipk = 1,5 x Ipeak

RMS current (Irms)

Refer to article table. No superimposed Irms must be applied at Tamb > +95°C (at Tamb > +95°C Irms must be = 0)

Dissipation factor (DF), max.

Measured at 25 \pm 5°C, 1 kHz	MHBS: tg $\delta \times 10^{-4}$	MHBM: tg $\delta \times 10^{-4}$
Cn $\leq 4 \mu$ F	6	8
4 μ F < Cn $\leq 12 \mu$ F (P $\leq 37,5$ mm)	8	10
12 μ F (P $\leq 37,5$ mm) < Cn $\leq 20 \mu$ F	11	14
20 μ F < Cn $\leq 40 \mu$ F	14	18
40 μ F < Cn $\leq 75 \mu$ F	18	22
75 μ F < Cn $\leq 100 \mu$ F	22	28
Cn > 100 μ F	28	35

Typical Equivalent Series Resistance (ESR) at the reference frequency

Refer to article table

Insulation resistance (R_{INS})

$\geq 3000s$ (10000s typical) but need not exceed 3 G Ω , between terminals, at $\pm 25^\circ C$, after 1 minute of electrification at 100 Vdc

Test voltage between terminals (Ut)

MHBS and MHBM: 1,5xUr (DC); MHBM only: 1,5xUrms (AC), applied for 10s, at 25 \pm 5°C

Test voltage between terminals and case (Utc)

3kV 50 \div 60Hz applied for 60s at 25 \pm 5°C

Damp heat test (steady state)

Test conditions:

Temperature = +40 \pm 2°C

Relative humidity = 93 \pm 2%

Test duration = 56 days

Performance:

Capacitance change $\leq \pm 3\%$

DF change ≤ 2 x initial limit (1kHz)

R_{INS} $\geq 50\%$ of initial limit value



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

• DC-Link • suitable for high Irms switching applications (*)

• MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Biased damp heat tests

a) AEC Q-200 - cockpit (MHBS and MHBM)

Test conditions:

Rated Ur (DC)

Temperature= +40±2°C

Relative humidity=93±2%

Test duration= 1000h

b) robustness under high humidity, Grade II (MHBS only, not applicable to MHBM)

Test conditions:

Rated Ur (DC)

Temperature= +40±2°C

Relative humidity=93±2%

Test duration= 1344h (56 days)

Performance:

Capacitance change ≤ ±10%

DF change ≤ 2 x initial limit at 1kHz

R_{INS} ≥ 50% of initial limit value

Box distortion ≤ 1/16 of the nominal box thickness (B size) or ≤ 1mm, whichever is the highest (ref. GTI Chapter)

Life expectancy

MHBS: ≥ 200000 hours at Ur with T(case) ≤ +70°C: expected life max.

absolute limit reference. ≥ 100000 hours at Ur with T(case) = + 85°C: reference for expected life calculations at different operating conditions (and expected life at max. admissible voltage at +70°C, case). ≥ 30000 hours at de-rated Ur (Ur x 0.8) at T(case) = +100°C without superimposed

ripple current applied.

MHBM: ≥ 60000 hours at Urms or ≥ 200000 hours at Ur with T(case) ≤ +70°C: expected life max. **absolute limit reference.** ≥ 30000 hours at Urms or ≥ 100000 hours at Ur with T(case) = + 85°C: reference for expected life calculations at different operating conditions. ≥ 10000 hours at de-rated Urms (Urms x 0.8) or ≥ 30000 hours at de-rated Ur (Ur x 0.8) at T(case) = +100°C without superimposed ripple current applied. For humidity effects potentially affecting the expected life, please refer to the GTI chapter.

Failure quota

MHBS and MHBM: upon DC applications, 300/10⁹ component hours (standard failure quota reference)

MHBM: upon AC applications, 1.5 x standard failure quota reference

Typical capacitance change versus operating time (at Tcase=+70°C)

MHBS: ±5% after 100000 hours at Ur

MHBM: ±10% after 30000 hours at Urms or after 100000 hours at Ur

Resistance to soldering heat test

Test conditions:

Solder bath temperature= +260 ±5°C

Dipping time (with heat screen)= 10 ±1s

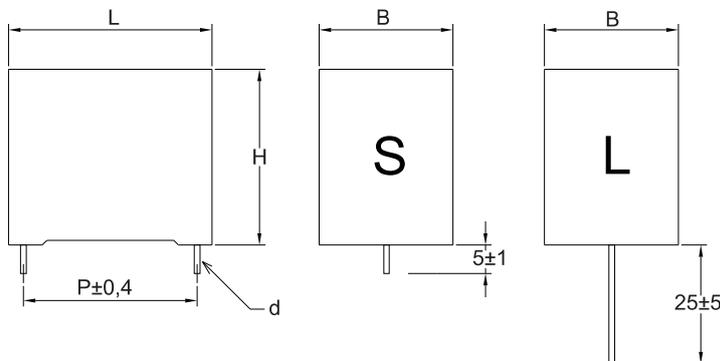
Performance:

Capacitance change ≤ ±1%

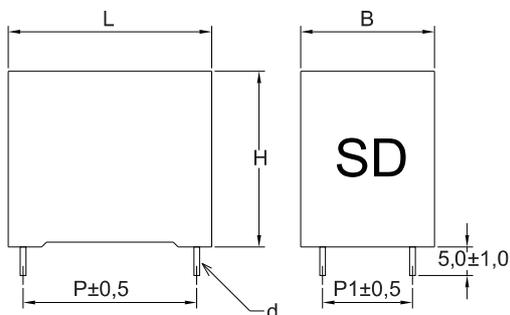
DF change ≤ 0.0010 at 1kHz

R_{INS} ≥ 50% of initial limit value

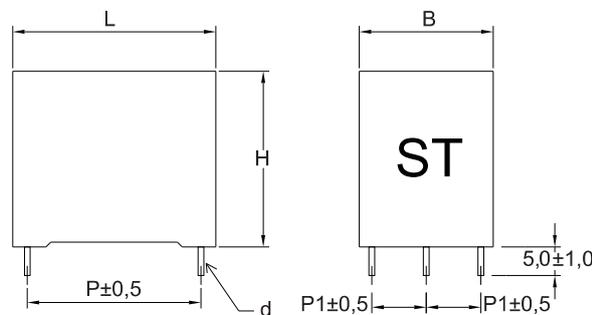
2 terminals execution



4 terminals execution



6 terminals execution





MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

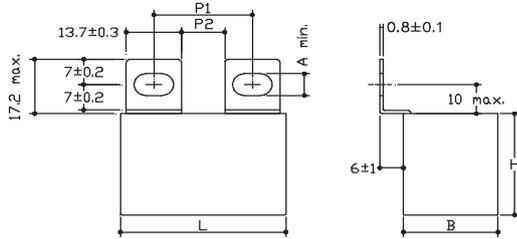
- DC-Link • suitable for high I_{rms} switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions

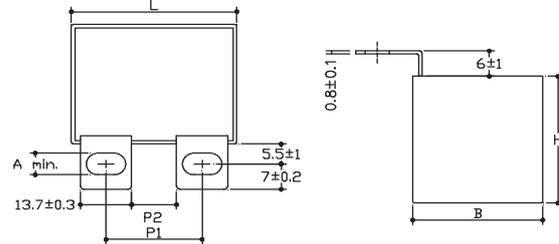


Dimensions in mm (drawings not in scale)

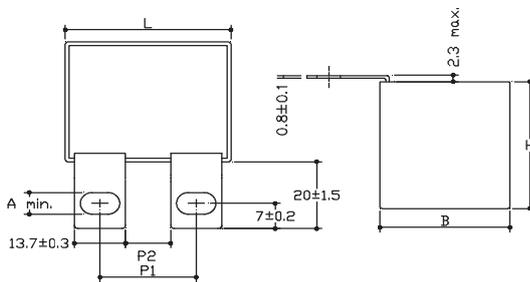
Style SP-SPM8 / SR-SRM8



Style VP-VPM8 / VR-VRM8



Style FP-FPM8 / FR-FRM8



Fixing pitch and distance between lugs (mm)

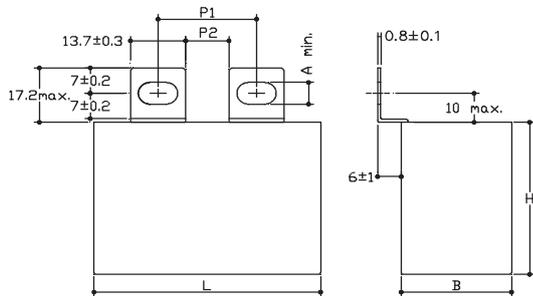
Lugs style	L	P1	P2
SP-SPM8	42÷42,5	23÷28(M6) 25÷26(M8)	11min.
VP-VPM8	57,5	37÷42(M6) 39÷40(M8)	24min.
FP-FPM8	57,5	34÷39(M6) 36÷37(M8)	21min.
SR-SRM8	42÷42,5	20÷25(M6) 22÷23(M8)	8min.
VR-VRM8	57,5	34÷39(M6) 36÷37(M8)	21min.
FR-FRM8	57,5	34÷39(M6) 36÷37(M8)	21min.

Fixing slot size (mm)**

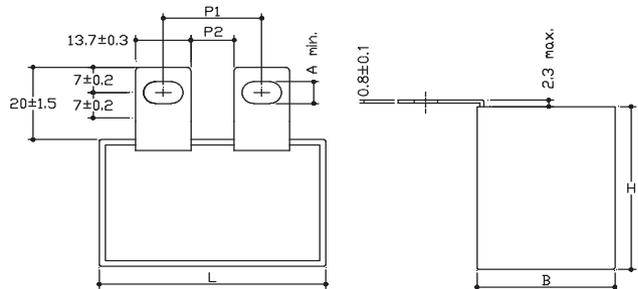
SP, VP, FP, SR, VR, FR	A = 6min.
SPM8, VPM8, FPM8, SRM8, VRM8, FRM8	A = 8min.

** Standard fixing slots for M6 screws, slots for M8 screws available upon request

Style SN-SNM8 (for L=57,5mm only)



Style VN-VNM8 (for L=57,5mm only)



Fixing pitch and distance between lugs (mm)

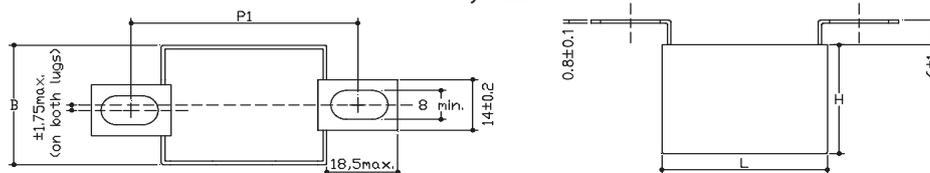
Lugs style	L	P1	P2
SN-SNM8	42÷42,5	Not available	-
VN-VNM8	57,5	23÷28 (M6) 25÷26 (M8)	11min.

Fixing slot size (mm)**

SN, VN	A = 6min.
SNM8, VNM8	A = 8min.

** Standard fixing slots for M6 screws, slots for M8 screws available upon request

Style AP



Fixing pitch and distance between lugs (mm)

Lugs style	L	P1	P2
AP	42÷42,5	53,5÷63 (M8)	-
	57,5	68,5÷77 (M8)	-



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

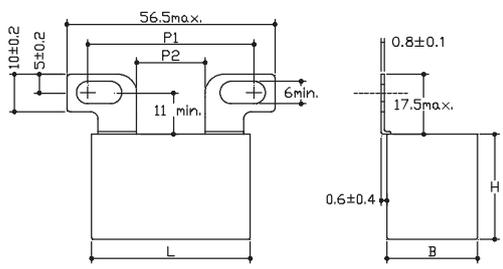
- DC-Link • suitable for high I_{rms} switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



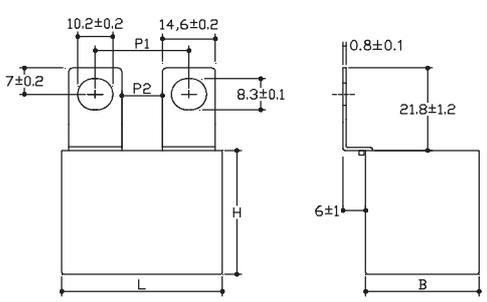
Dimensions in mm (drawings not in scale)

Style **BP** (Not available for L=57,5mm)



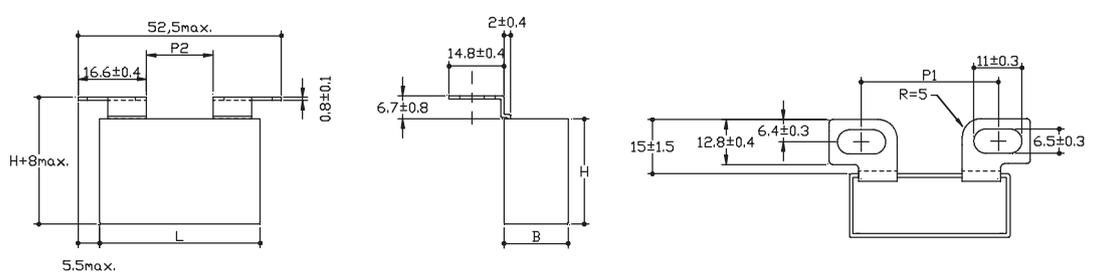
Fixing pitch and distance between lugs (mm)			
Lugs style	L	P1	P2
BP	42÷42,5	32÷45 (M6)	17min.
	57,5	Not available	

Style **SL** (M8 slots only)



Fixing pitch and distance between lugs (mm)			
Lugs style	L	P1	P2
SL	42÷42,5	22÷24 (M8)	8min.
	57,5	36÷38 (M8)	21min.

Style **BN** (M6 slots only; not available for L=57,5mm and for L=42÷42,5mm having B>22mm)



Fixing pitch and distance between lugs (mm)			
Lugs style	L	P1	P2
BN	42÷42,5	30÷37 (M6)	15min.
		Not available for B>22	
	57,5	Not available	



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



MHBS35...: Ur = 575Vdc; Upkr = 660Vdc; Upk = 750Vdc

Max. admissible voltage at +70°C (case) = 630Vdc, Upkr = 720Vdc, Upk = 815Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
3	11	20	32	0,8	27,5	-	27	81	4	3	2	16,5	MHBS354300*H#
3,3	11	20	32	0,8	27,5	-	27	89,1	4,5	3,5	2,5	15	MHBS354330*H#
4,7	13	22	32	1	27,5	-	27	126,9	5,5	4,5	3,5	11,6	MHBS354470*H#
5	13	22	32	1	27,5	-	27	135	6	4,5	3,5	11	MHBS354500*H#
6,8	15	24,5	32	1	27,5	-	27	102,6	7	5,5	4	9,4	MHBS354680*H#
7,5	14	28	32	1,2	27,5	-	27	202,5	8	6,5	4,5	8,6	MHBS354750*H#
10	18	33	32	1,2	27,5	-	27	270	10	8	5,5	7	MHBS355100*H#
12	18	33	32	1,2	27,5	-	27	324	11	8,5	6,5	6,1	MHBS355120*H#
12	18	33	32	1,2	27,5	5,1	27	324	12	9,5	7	5,4	MHBS355120*HSD
12	17	28	42,5	1,2	37,5	-	19	228	9,5	7,5	5,5	7,4	MHBS355120*J#
12	17	28	42,5	-	-	-	19	228	11	8,5	6,5	6,6	MHBS355120*\$\$
15	22	37	32	1,2	27,5	-	27	405	13,5	10,5	7,5	5,6	MHBS355150*H#
15	22	37	32	1,2	27,5	10,2	27	405	14,5	11,5	8,5	4,9	MHBS355150*HSD
15	22	30	42,5	1,2	37,5	-	19	285	11	8,5	6,5	6,4	MHBS355150*J#
15	22	30	42,5	-	-	-	19	285	13	10	7,5	5,6	MHBS355150*\$\$
20	20	40	41,5	1,2	37,5	-	19	380	13,5	11	8	5,6	MHBS355200*J#
20	20	40	41,5	1,2	37,5	10,2	19	380	15	12	8,5	5	MHBS355200*JSD
20 ⁽⁴⁾	20	40	41,5	-	-	-	19	380	16,5	12,5	9,5	4,8	MHBS355200*\$\$ ⁽⁴⁾
25	28	37	42,5	1,2	37,5	-	19	475	14	11,5	8,5	5	MHBS355250*J#
25	28	37	42,5	1,2	37,5	10,2	19	475	15,5	12,5	9	4,4	MHBS355250*JSD
25	28	37	42,5	-	-	-	19	475	17	13,5	10	4,2	MHBS355250*\$\$
30	28	37	42,5	1,2	37,5	-	19	570	14	12	9	4,6	MHBS355300*J#
30	28	37	42,5	1,2	37,5	10,2	19	570	16,5	13	9,5	4	MHBS355300*JSD
30	28	37	42,5	-	-	-	19	570	18,5	14,5	10,5	3,8	MHBS355300*\$\$
30	24	44	41,5	1,2	37,5	-	19	570	14	12	9	4,6	MHBS355300*J#A
30	24	44	41,5	1,2	37,5	10,2	19	570	17,5	14	10	4	MHBS355300*JSDA
35	30	45	42,5	1,2	37,5	-	19	665	14	14	11	4,3	MHBS355350*J#
35	30	45	42,5	1,2	37,5	20,3	19	665	19	15,5	11	3,7	MHBS355350*JSD
35	30	45	42,5	-	-	-	19	665	21	16,5	12,5	3,5	MHBS355350*\$\$
40	30	45	42,5	1,2	37,5	-	19	760	14	14	11	4	MHBS355400*J#
40	30	45	42,5	1,2	37,5	20,3	19	760	20	16	12	3,4	MHBS355400*JSD
40	30	45	42,5	-	-	-	19	760	22	17,5	13	3,2	MHBS355400*\$\$
47	35	50	42	1,2	37,5	-	19	893	14	14	12	3,6	MHBS355470*J#
47	35	50	42	1,2	37,5	20,3	19	893	23	18,5	13	3	MHBS355470*JSD
47	35	50	42	-	-	-	19	893	25,5	20,5	14,5	2,8	MHBS355470*\$\$
50	30	45	57,5	1,2	52,5	-	12,5	625	14	14	10	4,6	MHBS355500*R#
50	30	45	57,5	1,2	52,5	20,3	12,5	625	19	15,5	11	4	MHBS355500*RSD
50	30	45	57,5	-	-	-	12,5	625	21,5	17,5	12,5	3,8	MHBS355500*\$\$
60	30	45	57,5	1,2	52,5	-	12,5	750	14	14	10,5	4,2	MHBS355600*R#
60	30	45	57,5	1,2	52,5	20,3	12,5	750	20,5	16,5	12	3,6	MHBS355600*RSD
60	30	45	57,5	-	-	-	12,5	750	23	18,5	13,5	3,4	MHBS355600*\$\$

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

• DC-Link • suitable for high Irms switching applications (*)

• MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
75	35	50	57,5	1,2	52,5	-	12,5	937,5	14	14	12	3,9	MHBS355750*R#
75	35	50	57,5	1,2	52,5	20,3	12,5	937,5	23	18,5	13,5	3,3	MHBS355750*RSD
75	35	50	57,5	-	-	-	12,5	937,5	25,5	20,5	15	3,1	MHBS355750*\$\$
90	38	57,5	57,5	1,2	52,5	20,3	12,5	1125	25	20	15	3,1	MHBS355900*RSD
90	38	57,5	57,5	1,2	52,5	10,2	12,5	1125	26	21	15,5	2,9	MHBS355900*RST
90	38	57,5	57,5	-	-	-	12,5	1125	27,5	22	16,5	2,9	MHBS355900*\$\$
100	38	57,5	57,5	1,2	52,5	20,3	12,5	1250	26	20,5	15,5	3	MHBS356100*RSD
100	38	57,5	57,5	1,2	52,5	10,2	12,5	1250	27	21,5	16	2,8	MHBS356100*RST
130 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	12,5	1625	27	23,5	16,5	2,6	MHBS356130*RSD ⁽⁶⁾
130 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	12,5	1625	30	24,5	17	2,5	MHBS356130*RST ⁽⁶⁾
130 ⁽⁶⁾	45	65	57,5	-	-	-	12,5	1625	32,5	26,5	18,5	2,5	MHBS356130*\$\$ ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

- MKP • box with multiple radial or lug terminals • high energy density
- DC-Link • suitable for high Irms switching applications (*)
 - MHBM only: also suitable for AC applications (*)

(*) upon restrictions



MHBS40...: Ur = 700Vdc; Upkr = 805Vdc; Upk = 910Vdc
Max. admissible voltage at +70°C (case) = 770Vdc, Upkr = 885Vdc, Upk = 1000Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
2,2	11	20	32	0,8	27,5	-	31	68,2	4	3	2,5	17,7	MHBS404220*H#
2,5	11	20	32	0,8	27,5	-	31	77,5	4,5	3,5	3	15,8	MHBS404250*H#
3,3	13	22	32	1	27,5	-	31	102,3	5,5	4,5	3,5	13,3	MHBS404330*H#
4,7	15	24,5	32	1	27,5	-	31	145,7	6,5	5,5	4	10,5	MHBS404470*H#
5	15	24,5	32	1,2	27,5	-	31	155	7	5,5	4	9,7	MHBS404500*H#
7,5	14	25	42,5	1,2	37,5	-	21	157,5	7,5	6	4,5	9,2	MHBS404750*J#
10	18	33	32	1,2	27,5	-	31	310	11	8,5	6	6,7	MHBS405100*H#
10	18	33	32	1,2	27,5	5,1	31	310	12	9,5	6,5	6	MHBS405100*HSD
12	22	37	32	1,2	27,5	-	31	372	13	10,5	7,5	5,8	MHBS405120*H#
12	22	37	32	1,2	27,5	10,2	31	372	14,5	11,5	8,5	5,2	MHBS405120*HSD
12	22	30	42,5	1,2	37,5	-	21	252	11	8,5	6,5	6,4	MHBS405120*J#
12	22	30	42,5	-	-	-	21	252	13	10	7,5	5,6	MHBS405120*\$\$
15	22	33,5	42,5	1,2	37,5	-	21	315	12	9,5	7	5,5	MHBS405150*J#
15	22	33,5	42,5	1,2	37,5	5,1	21	315	13,5	10,5	7,5	4,9	MHBS405150*JSD
15	22	33,5	42,5	-	-	-	21	315	14,5	11,5	8,5	4,7	MHBS405150*\$\$
20 ⁽⁴⁾	24	44	41,5	-	-	-	21	420	18,5	14,5	10,5	4,1	MHBS405200*\$\$ ⁽⁴⁾
20	28	37	42,5	1,2	37,5	-	21	420	14	11,5	8,5	4,9	MHBS405200*J#
20	28	37	42,5	1,2	37,5	10,2	21	420	16	12,5	9	4,3	MHBS405200*JSD
20	28	37	42,5	-	-	-	21	420	17,5	14	10	4,1	MHBS405200*\$\$A
22	24	44	41,5	1,2	37,5	-	21	462	14	13	9,5	4,6	MHBS405220*J#
22	24	44	41,5	1,2	37,5	10,2	21	462	17,5	14	10,5	4	MHBS405220*JSD
22 ⁽⁴⁾	24	44	41,5	-	-	-	21	462	19,5	15,5	11,5	3,8	MHBS405220*J\$\$ ⁽⁴⁾
22	28	37	42,5	1,2	37,5	-	21	462	14	12	9	4,6	MHBS405220*J#A
22	28	37	42,5	1,2	37,5	10,2	21	462	16,5	13,5	10	4	MHBS405220*JSDA
22	28	37	42,5	-	-	-	21	462	18,5	14,5	10,5	3,8	MHBS405220*J\$\$A
25	24	44	41,5	1,2	37,5	-	21	525	14	13,5	10	4,3	MHBS405250*J#
25	24	44	41,5	1,2	37,5	10,2	21	525	19	15	11	3,7	MHBS405250*JSD
25 ⁽⁴⁾	24	44	41,5	-	-	-	21	525	21	16,5	12	3,5	MHBS405250*J\$\$ ⁽⁴⁾
30	30	45	42,5	1,2	37,5	-	21	630	14	14	11	4	MHBS405300*J#
30	30	45	42,5	1,2	37,5	20,3	21	630	20,5	16	12	3,4	MHBS405300*JSD
30	30	45	42,5	-	-	-	21	630	22,5	17,5	13	3,2	MHBS405300*\$\$
40	35	50	42	1,2	37,5	-	21	840	14	14	12	3,5	MHBS405400*J#
40	35	50	42	1,2	37,5	20,3	21	840	23,5	19	13,5	2,9	MHBS405400*JSD
40	35	50	42	-	-	-	21	840	25,5	20,5	14,5	2,8	MHBS405400*\$\$A
40	30	45	57,5	1,2	52,5	-	14,5	580	14	14	10,5	4,5	MHBS405400*R#
40	30	45	57,5	1,2	52,5	20,3	14,5	580	20	16	11,5	3,8	MHBS405400*RSD
40	30	45	57,5	-	-	-	14,5	580	22	17,5	12,5	3,6	MHBS405400*\$\$
45	30	45	57,5	1,2	52,5	-	14,5	652,5	14	14	11	4,2	MHBS405450*R#
45	30	45	57,5	1,2	52,5	20,3	14,5	652,5	21	16,5	12	3,6	MHBS405450*RSD
45	30	45	57,5	-	-	-	14,5	652,5	23	18	13	3,4	MHBS405450*\$\$

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "\$\$" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
50	35	50	57,5	1,2	52,5	-	14,5	725	14	14	12	4	MHBS405500*R#
50	35	50	57,5	1,2	52,5	20,3	14,5	725	22,5	18	13	3,4	MHBS405500*RSD
50	35	50	57,5	-	-	-	14,5	725	24,5	19,5	14,5	3,2	MHBS405500*\$\$
55	35	50	57,5	1,2	52,5	-	14,5	797,5	14	14	12,5	3,9	MHBS405550*R#
55	35	50	57,5	1,2	52,5	20,3	14,5	797,5	23,5	19	13,5	3,3	MHBS405550*RSD
55	35	50	57,5	-	-	-	14,5	797,5	25,5	20,5	15	3,1	MHBS405550*\$\$
60	35	50	57,5	1,2	52,5	-	14,5	870	14	14	13	3,7	MHBS405600*R#
60	35	50	57,5	1,2	52,5	20,3	14,5	870	24,5	19,5	14	3,1	MHBS405600*RSD
60	35	50	57,5	-	-	-	14,5	870	26,5	21	15,5	2,9	MHBS405600*\$\$
75	38	57,5	57,5	1,2	52,5	20,3	14,5	1087,5	26	20,5	15,5	2,9	MHBS405750*RSD
75	38	57,5	57,5	1,2	52,5	10,2	14,5	1087,5	27	21,5	16	2,7	MHBS405750*RST
75	38	57,5	57,5	-	-	-	14,5	1087,5	28,5	23	17	2,7	MHBS405750*\$\$
80	38	57,5	57,5	1,2	52,5	20,3	14,5	1160	26,5	21	16	2,8	MHBS405800*RSD
80	38	57,5	57,5	1,2	52,5	10,2	14,5	1160	27,5	22	16,5	2,6	MHBS405800*RST
100 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	14,5	1450	27	24,5	17	2,5	MHBS406100*RSD ⁽⁶⁾
100 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	14,5	1450	30,5	25	17,5	2,4	MHBS406100*RST ⁽⁶⁾
100 ⁽⁶⁾	45	65	57,5	1,2	-	-	14,5	1450	32,5	26,5	18,5	2,4	MHBS406100*\$\$ ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the “*” symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the “#” symbol with S for 5mm and L for 25mm leads length terminals; change the “\$\$” characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

- MKP • box with multiple radial or lug terminals • high energy density
- DC-Link • suitable for high Irms switching applications (*)
 - MHBM only: also suitable for AC applications (*)

(*) upon restrictions



MHBS45...: Ur = 800Vdc; Upkr = 920Vdc; Upk = 1040Vdc
Max. admissible voltage at +70°C (case) = 880Vdc, Upkr = 1010Vdc, Upk = 1140Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
2	11	20	32	0,8	27,5	-	36	72	4	3,5	2,5	16,7	MHBS454200*H#
2,2	11	20	32	0,8	27,5	-	36	79,2	4,5	4	3	15,3	MHBS454220*H#
3	13	22	32	1	27,5	-	36	108	5,5	4,5	3,5	12,4	MHBS454300*H#
4	15	24,5	32	1	27,5	-	36	144	6,5	5,5	4	10,8	MHBS454400*H#
5	14	28	32	1,2	27,5	-	36	180	8	6,5	4,5	9,4	MHBS454500*H#
5	14	25	42,5	1,2	37,5	-	24	120	7,5	6	4	10,3	MHBS454500*J#
6,8	18	33	32	1,2	27,5	-	36	244,8	9,5	7,5	5,5	7,6	MHBS454680*H#
7,5	18	33	32	1,2	27,5	-	36	270	10,5	8,5	6	7,1	MHBS454750*H#
7,5	18	33	32	1,2	27,5	5,1	36	270	11,5	9	6,5	6,5	MHBS454750*HSD
7,5	17	28	42,5	1,2	37,5	-	24	180	9	7	5	8,3	MHBS454750*J#
7,5	17	28	42,5	-	-	-	24	180	10,5	8,5	6	7	MHBS454750*\$\$
10	22	37	32	1,2	27,5	-	36	360	13	10,5	7,5	5,9	MHBS455100*H#
10	22	37	32	1,2	27,5	10,2	24	360	14,5	11,5	8,5	5,3	MHBS455100*HSD
10	22	30	42,5	1,2	37,5	-	24	240	10,5	8,5	6	7	MHBS455100*J#
10	22	30	42,5	1,2	37,5	5,1	24	240	11,5	9	6,5	6,4	MHBS455100*JSD
10	22	30	42,5	-	-	-	24	240	12,5	10	7,5	6,2	MHBS455100*\$\$
12	22	33,5	42,5	1,2	37,5	-	24	288	11,5	9	7	6,4	MHBS455120*J#
12	22	33,5	42,5	1,2	37,5	5,1	24	288	12,5	10	7,5	5,8	MHBS455120*JSD
12	22	33,5	42,5	-	-	-	24	288	13,5	11	8	5,6	MHBS455120*\$\$
15	20	40	41,5	1,2	37,5	-	24	360	13,5	11	8	5,6	MHBS455150*J#
15	20	40	41,5	1,2	37,5	10,2	24	360	15	12	8,5	5	MHBS455150*JSD
20	24	44	41,5	1,2	37,5	-	24	480	14	13	9,5	4,8	MHBS455200*J#
20	24	44	41,5	1,2	37,5	10,2	24	480	18	14,5	10,5	4,2	MHBS455200*JSD
22	30	45	42,5	1,2	37,5	-	24	528	14	13,5	10	4,6	MHBS455220*J#
22	30	45	42,5	1,2	37,5	20,3	24	528	18,5	14,5	10,5	4	MHBS455220*JSD
22	30	45	42,5	-	-	-	24	528	20,5	16	12	3,8	MHBS455220*\$\$
25	30	45	42,5	1,2	37,5	-	24	600	14	14	10,5	4,3	MHBS455250*J#
25	30	45	42,5	1,2	37,5	20,3	24	600	19,5	15,5	11,5	3,7	MHBS455250*JSD
25	30	45	42,5	-	-	-	24	600	22	17	12,5	3,5	MHBS455250*\$\$
30	35	50	42	1,2	37,5	-	24	720	14	16	11,5	3,8	MHBS455300*J#
30	35	50	42	1,2	37,5	20,3	24	720	22,5	18	13	3,2	MHBS455300*JSD
30	35	50	42	-	-	-	24	720	24,5	20	14	3	MHBS455300*\$\$A
30	30	45	57,5	1,2	52,5	-	16,5	495	14	14	10	4,9	MHBS455300*R#
30	30	45	57,5	1,2	52,5	20,3	16,5	495	19	15,5	11	4,3	MHBS455300*RSD
30	30	45	57,5	-	-	-	16,5	495	21	16,5	12	4,1	MHBS455300*\$\$
35	30	45	57,5	1,2	52,5	-	16,5	577,5	14	14	11	4,5	MHBS455350*R#
35	30	45	57,5	1,2	52,5	20,3	16,5	577,5	20	16	11,5	3,9	MHBS455350*RSD
35	30	45	57,5	-	-	-	16,5	577,5	22	17,5	13	3,7	MHBS455350*\$\$
40	35	50	57,5	1,2	52,5	-	16,5	660	14	14	11,5	4,2	MHBS455400*R#
40	35	50	57,5	1,2	52,5	20,3	16,5	660	21,5	17,5	12,5	3,6	MHBS455400*RSD
40	35	50	57,5	-	-	-	16,5	660	23,5	19	14	3,4	MHBS455400*\$\$

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
45	35	50	57,5	1,2	52,5	-	16,5	742,5	14	14	12	4	MHBS455450*R#
45	35	50	57,5	1,2	52,5	20,3	16,5	742,5	23	18,5	13,5	3,4	MHBS455450*RSD
45	35	50	57,5	-	-	-	16,5	742,5	25,5	20	15	3,2	MHBS455450*\$\$
47	35	50	57,5	1,2	52,5	-	16,5	775,5	14	14	12,5	3,9	MHBS455470*R#
47	35	50	57,5	1,2	52,5	20,3	16,5	775,5	23,5	19	13,5	3,3	MHBS455470*RSD
60	38	57,5	57,5	1,2	52,5	20,3	16,5	990	25,5	20,5	15,5	3	MHBS455600*RSD
60	38	57,5	57,5	1,2	52,5	10,2	16,5	990	26,5	21,5	15,5	2,8	MHBS455600*RST
60	38	57,5	57,5	-	-	-	16,5	990	28,5	22,5	16,5	2,8	MHBS455600*\$\$
65	38	57,5	57,5	1,2	52,5	20,3	16,5	1072,5	26,5	21	15,5	2,9	MHBS455650*RSD
65	38	57,5	57,5	1,2	52,5	10,2	16,5	1072,5	27,5	22	16	2,7	MHBS455650*RST
82 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	16,5	1353	27	24	17	2,6	MHBS455820*RSD ⁽⁶⁾
82 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	16,5	1353	30	24,5	17	2,5	MHBS455820*RST ⁽⁶⁾
82 ⁽⁶⁾	45	65	57,5	-	-	-	16,5	1353	32	26	18,5	2,5	MHBS455820*\$\$ ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

- MKP • box with multiple radial or lug terminals • high energy density
- DC-Link • suitable for high Irms switching applications (*)
 - MHBM only: also suitable for AC applications (*)

(*) upon restrictions



MHBS50...: Ur = 900Vdc; Upkr = 1035Vdc; Upk = 1170Vdc
Max. admissible voltage at +70°C (case) = 1000Vdc, Upkr = 1150Vdc, Upk = 1300Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
2,2	13	22	32	1	27,5	-	41,5	91,3	5	4	3	14,7	MHBS504220*H#
2,5	13	22	32	1	27,5	-	41,5	103,7	5,5	4,5	3	13,5	MHBS504250*H#
3	15	24,5	32	1	27,5	-	41,5	124,5	6,5	5	3,5	11,9	MHBS504300*H#
3,3	14	28	32	1,2	27,5	-	41,5	137	7	5,5	4	11	MHBS504330*H#
4,7	18	33	32	1,2	27,5	-	41,5	195	8,5	6,5	5	9	MHBS504470*H#
4,7	14	25	42,5	1,2	37,5	-	28	131,6	7	5,5	4	10,6	MHBS504470*J#
6	18	33	32	1,2	27,5	-	41,5	249	10	8	6	7,6	MHBS504600*H#
6	18	33	32	1,2	27,5	5,1	41,5	249	11	8,5	6	7	MHBS504600*HSD
6	17	28	42,5	1,2	37,5	-	28	168	8,5	6,5	5	9,2	MHBS504600*J#
6	17	28	42,5	-	-	-	28	168	10	8	6	8,4	MHBS504600*\$\$
7,5	22	37	32	1,2	27,5	-	41,5	311,2	12,5	9,5	7	6,9	MHBS504750*H#
7,5	22	37	32	1,2	27,5	10,2	41,5	311,2	13,5	10,5	8	6,3	MHBS504750*HSD
7,5	22	30	42,5	1,2	37,5	-	28	210	10	8	5,5	8	MHBS504750*J#
7,5	22	30	42,5	-	-	-	28	210	12	9,5	7	7,2	MHBS504750*\$\$
10	22	33,5	42,5	1,2	37,5	-	28	280	11,5	9	6,5	6,8	MHBS505100*J#
10	22	33,5	42,5	1,2	37,5	5,1	28	280	12,5	9,5	7	6,2	MHBS505100*JSD
10	22	33,5	42,5	-	-	-	28	280	13,5	10,5	8	6	MHBS505100*\$\$
12	20	40	41,5	1,2	37,5	-	28	336	13,5	11	7,5	6,3	MHBS505120*J#
12	20	40	41,5	1,2	37,5	10,2	28	336	14,5	11,5	8	5,7	MHBS505120*JSD
12 ⁽⁴⁾	20	40	41,5	-	-	-	28	336	15,5	12,5	9	5,5	MHBS505120*\$\$ ⁽⁴⁾
15	24	44	41,5	1,2	37,5	-	28	420	14	12,5	9,5	5,3	MHBS505150*J#
15	24	44	41,5	1,2	37,5	10,2	28	420	17	14	10,5	4,7	MHBS505150*JSD
15 ⁽⁴⁾	24	44	41,5	-	-	-	28	420	18,5	15	11,5	4,5	MHBS505150*\$\$ ⁽⁴⁾
15	28	37	42,5	1,2	37,5	-	28	420	14	11,5	8	5,3	MHBS505150*J#A
15	28	37	42,5	1,2	37,5	10,2	28	420	15,5	12,5	9	4,7	MHBS505150*JSDA
15	28	37	42,5	-	-	-	28	420	17,5	14	10,5	4,5	MHBS505150*\$\$A
20	30	45	42,5	1,2	37,5	-	28	560	14	14	10,5	4,5	MHBS505200*J#
20	30	45	42,5	1,2	37,5	20,3	28	560	19	15	11	3,9	MHBS505200*JSD
20	30	45	42,5	-	-	-	28	560	21	16,5	12	3,7	MHBS505200*\$\$
25	35	50	42	1,2	37,5	-	28	700	14	14	11,5	4	MHBS505250*J#
25	35	50	42	1,2	37,5	20,3	28	700	21,5	17,5	12,5	3,4	MHBS505250*JSD
25	35	50	42	-	-	-	28	700	24	19,5	13,5	3,2	MHBS505250*\$\$A
25	30	45	57,5	1,2	52,5	-	18,5	462,5	14	13	10	5,3	MHBS505250*R#
25	30	45	57,5	1,2	52,5	20,3	18,5	462,5	18	15	11	4,7	MHBS505250*RSD
25	30	45	57,5	-	-	-	18,5	462,5	19,5	16	11,5	4,5	MHBS505250*\$\$
35	35	50	57,5	1,2	52,5	-	18,5	647,5	14	14	12	4,2	MHBS505350*R#
35	35	50	57,5	1,2	52,5	20,3	18,5	647,5	22	17,5	13	3,6	MHBS505350*RSD
35	35	50	57,5	-	-	-	18,5	647,5	24	19	14	3,4	MHBS505350*\$\$
40 ⁽⁵⁾	35	50	57,5	1,2	52,5	-	18,5	740	14	14	13	3,9	MHBS505400*R# ⁽⁵⁾
40 ⁽⁵⁾	35	50	57,5	1,2	52,5	20,3	18,5	740	23,5	19	13,5	3,3	MHBS505400*RSD ⁽⁵⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
47	38	57,5	57,5	1,2	52,5	20,3	18,5	869,5	25,5	20,5	15	3	MHBS505470*RSD
47	38	57,5	57,5	1,2	52,5	10,2	18,5	869,5	26,5	21,5	15,5	2,8	MHBS505470*RST
47	38	57,5	57,5	-	-	-	18,5	869,5	28,5	23	16,5	2,8	MHBS505470*\$\$
50	38	57,5	57,5	1,2	52,5	20,3	18,5	925	26	21	15	3	MHBS505500*RSD
50	38	57,5	57,5	1,2	52,5	10,2	18,5	925	27	22	16	2,8	MHBS505500*RST
65 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	18,5	1202,5	27	24	17	2,6	MHBS505650*RSD ⁽⁶⁾
65 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	18,5	1202,5	30	24,5	17	2,5	MHBS505650*RST ⁽⁶⁾
65 ⁽⁶⁾	45	65	57,5	-	-	-	18,5	1202,5	32	26	18,5	2,5	MHBS505650*\$\$ ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



MHBS55...: Ur = 1000Vdc; Upkr = 1150Vdc; Upk = 1300Vdc

Max. admissible voltage at +70°C (case) = 1100Vdc, Upkr = 1265Vdc, Upk = 1430Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A ΔT=+15°C	A ΔT=+10°C	A ΔT=+5°C		
1,2	11	20	32	0,8	27,5	-	47	56,4	3,5	2,5	2	20,5	MHBS554120*H#
1,5	11	20	32	0,8	27,5	-	47	70,5	4,5	3,5	2,5	17,8	MHBS554150*HS
2	13	22	32	1	27,5	-	47	96	5,5	4	3	14,5	MHBS554200*H#
2,5	15	24,5	32	1	27,5	-	47	117,5	6	5	3,5	12,8	MHBS554250*H#
3	14	28	32	1,2	27,5	-	47	141	7,5	6	4	11	MHBS554300*H#
4	14	25	42,5	1,2	37,5	-	31	124	7	5,5	4	11	MHBS554400*J#
4,7	18	33	32	1,2	27,5	-	47	220,9	9,5	7,5	5,5	8,3	MHBS554470*H#
4,7	18	33	32	1,2	27,5	10,2	47	220,9	10,5	8,5	6	7,7	MHBS554470*HSD
4,7	17	28	42,5	1,2	37,5	-	31	145,7	8,5	6,5	4,5	9,6	MHBS554470*J#
4,7	17	28	42,5	-	-	-	31	145,7	9,5	7,5	5,5	8,7	MHBS554470*\$S
5	18	33	32	1,2	27,5	-	47	235	10	7,5	5,5	8	MHBS554500*H#
5	18	33	32	1,2	27,5	10,2	47	235	11	9	6,5	7,4	MHBS554500*HSD
5	17	28	42,5	1,2	37,5	-	31	155	9,5	7,5	5,5	9,3	MHBS554500*J#
5	17	28	42,5	-	-	-	31	155	10,5	8,5	6	8,5	MHBS554500*\$S
6,8	22	37	32	1,2	27,5	-	47	319,6	12	10	7,5	6,9	MHBS554680*H#
6,8	22	37	32	1,2	27,5	10,2	47	319,6	13,5	11	8	6,3	MHBS554680*HSD
6,8	22	30	42,5	1,2	37,5	-	31	210,8	10	8	6	7,9	MHBS554680*J#
6,8	22	30	42,5	-	-	-	31	210,8	11,5	9	7	7,1	MHBS554680*\$S
7,5	22	33,5	42,5	1,2	37,5	-	31	232,5	11	8,5	6,5	7,4	MHBS554750*J#
7,5	22	33,5	42,5	1,2	37,5	5,1	31	232,5	12	9,5	7	6,8	MHBS554750*JSD
7,5	22	33,5	42,5	-	-	-	31	232,5	13	10,5	7,5	6,6	MHBS554750*\$S
9	20	40	41,5	1,2	37,5	-	31	279	13	10	7,5	6,6	MHBS554900*J#
9	20	40	41,5	1,2	37,5	10,2	31	279	14,5	11	8	6	MHBS554900*JSD
9 ⁽⁴⁾	20	40	41,5	-	-	-	31	279	15,5	12	8,5	5,8	MHBS554900*\$S ⁽⁴⁾
10	20	40	41,5	1,2	37,5	-	31	310	13,5	10,5	8	6,3	MHBS555100*J#
10	20	40	41,5	1,2	37,5	10,2	31	310	15	11,5	8,5	5,7	MHBS555100*JSD
12	24	44	41,5	1,2	37,5	-	31	372	14	12	9	5,7	MHBS555120*J#
12	24	44	41,5	1,2	37,5	10,2	31	372	16,5	13,5	9,5	5,1	MHBS555120*JSD
12 ⁽⁴⁾	24	44	41,5	-	-	-	31	372	18	14	10,5	4,9	MHBS555120*\$S ⁽⁴⁾
12	28	37	42,5	1,2	37,5	-	31	372	14	11,5	8	5,7	MHBS555120*J#A
12	28	37	42,5	1,2	37,5	10,2	31	372	15	12	9	5,1	MHBS555120*JSDA
12	28	37	42,5	-	-	-	31	372	16,5	13,5	10	4,9	MHBS555120*\$SA
15	30	45	42,5	1,2	37,5	-	31	465	14	13,5	10	5	MHBS555150*J#
15	30	45	42,5	1,2	37,5	20,3	31	465	18	14,5	11	4,4	MHBS555150*JSD
15	30	45	42,5	-	-	-	31	465	20	16	12	4,2	MHBS555150*\$S
20	35	50	42	1,2	37,5	-	31	620	14	14	11	4,3	MHBS555200*J#
20	35	50	42	1,2	37,5	20,3	31	620	20,5	16,5	11,5	3,7	MHBS555200*JSD
20	35	50	42	-	-	-	31	620	23	18,5	13	3,5	MHBS555200*\$S
22	30	45	57,5	1,2	52,5	-	21	462	14	13,5	10	5,1	MHBS555220*R#
22	30	45	57,5	1,2	52,5	20,3	21	462	18,5	15	11	4,5	MHBS555220*RSD
22	30	45	57,5	-	-	-	21	462	20,5	16,5	12	4,3	MHBS555220*\$S

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$S" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A ΔT=+15°C	A (ΔT=+10°C)	A (ΔT=+5°C)		
30	35	50	57,5	1,2	52,5	-	21	630	14	14	11,5	4,3	MHBS555300*R#
30	35	50	57,5	1,2	52,5	20,3	21	630	22	17,5	12,5	3,8	MHBS555300*RSD
30	35	50	57,5	-	-	-	21	630	24	19	13,5	3,6	MHBS555300*\$\$
33	35	50	57,5	1,2	52,5	-	21	693	14	14	12	4,1	MHBS555330*R#
33	35	50	57,5	1,2	52,5	20,3	21	693	23	18,5	13	3,5	MHBS555330*RSD
40	38	57,5	57,5	1,2	52,5	20,3	21	840	25	20	14,5	3,2	MHBS555400*RSD
40	38	57,5	57,5	1,2	52,5	10,2	21	840	26	21	15	3	MHBS555400*RST
40	38	57,5	57,5	-	-	-	21	840	27,5	22	16,5	3	MHBS555400*\$\$
50 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	21	1050	27	22	15,5	3	MHBS555500*RSD ⁽⁶⁾
50 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	21	1050	28	22,5	16	2,9	MHBS555500*RST ⁽⁶⁾
50 ⁽⁶⁾	45	65	57,5	-	-	-	21	1050	30	24,5	17	2,9	MHBS555500*\$\$ ⁽⁶⁾
55 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	21	1155	27	23	16	2,8	MHBS555550*RSD ⁽⁶⁾
55 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	21	1155	28,5	23,5	16,5	2,7	MHBS555550*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

- MKP • box with multiple radial or lug terminals • high energy density
- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



MHBS60...: Ur = 1100Vdc; Upkr = 1265Vdc; Upk = 1430Vdc
Max. admissible voltage at +70°C (case) = 1200Vdc, Upkr = 1380Vdc, Upk = 1560Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
1	11	20	32	0,8	27,5	-	50	50	3,5	2,5	2	20,5	MHBS604100*H#
1,2	11	20	32	0,8	27,5	-	50	60	4,5	3,5	2,5	18	MHBS604120*H#
1,5	13	22	32	1	27,5	-	50	75	5	4	3	15,5	MHBS604150*H#
2	15	24,5	32	1	27,5	-	50	100	6	5	3,5	12,9	MHBS604200*H#
2,2	15	24,5	32	1	27,5	-	50	110	6	5	3,5	12,2	MHBS604220*H#
2,5	14	28	32	1,2	27,5	-	50	125	7	5,5	4	10,8	MHBS604250*H#
3	14	25	42	1,2	37,5	-	34	102	6,5	5	4	11,8	MHBS604300*J#
3,3	18	33	32	1,2	27,5	-	50	165	9	7	5	9,2	MHBS604330*H#
4	18	33	32	1,2	27,5	-	50	200	9,5	7,5	5,5	8,1	MHBS604400*H#
4	18	33	32	1,2	27,5	5,1	50	200	10,5	8,5	6	7,5	MHBS604400*HSD
4	17	28	42,5	1,2	37,5	-	34	136	8,5	6,5	4,5	9,9	MHBS604400*J#
4	17	28	42,5	-	-	-	34	136	9,5	7,5	5,5	9,1	MHBS604400*\$\$
4,7	22	37	32	1,2	27,5	-	50	235	11,5	9	7	7,4	MHBS604470*H#
4,7	22	37	32	1,2	27,5	10,2	50	235	12,5	10	7,5	6,8	MHBS604470*HSD
4,7	22	30	42,5	1,2	37,5	-	34	159,8	10	7,5	5,5	8,3	MHBS604470*J#
4,7	22	30	42,5	-	-	-	34	159,8	11,5	8,5	6,5	7,5	MHBS604470*\$\$
5	22	37	32	1,2	27,5	-	50	250	12	9,5	7	7,2	MHBS604500*H#
5	22	37	32	1,2	27,5	10,2	50	250	13	10,5	7,5	6,6	MHBS604500*HSD
5	22	30	42,5	1,2	37,5	-	34	170	10,5	8	5,5	8,1	MHBS604500*J#
5	22	30	42,5	-	-	-	34	170	12	9	6,5	7,3	MHBS604500*\$\$
6,8	22	33,5	42,5	1,2	37,5	-	34	231,2	11	9	6,5	6,9	MHBS604680*J#
6,8	22	33,5	42,5	1,2	37,5	5,1	34	231,2	12	9,5	7	6,3	MHBS604680*JSD
6,8	22	33,5	42,5	-	-	-	34	231,2	13	10,5	7,5	6,1	MHBS604680*\$\$
7,5	22	33,5	42,5	1,2	37,5	-	34	255	11,5	9,5	6,5	6,6	MHBS604750*J#
7,5	22	33,5	42,5	1,2	37,5	10,2	34	255	12,5	10,5	7,5	6	MHBS604750*JSD
7,5 ⁽⁴⁾	20	40	41,5	-	-	-	34	255	14	11,5	8,5	5,8	MHBS604750*\$\$ ⁽⁴⁾
10	24	44	41,5	1,2	37,5	-	34	340	14	12,5	9	5,5	MHBS605100*J#
10	24	44	41,5	1,2	37,5	10,2	34	340	17	13,5	10	4,9	MHBS605100*JSD
10 ⁽⁴⁾	24	44	41,5	-	-	-	34	340	18,5	14,5	10,5	4,7	MHBS605100*\$\$ ⁽⁴⁾
10	28	37	42,5	1,2	37,5	-	34	340	14	11	8	5,5	MHBS605100*J#A
10	28	37	42,5	1,2	37,5	10,2	34	340	15,5	12	9	4,9	MHBS605100*JSDA
10	28	37	42,5	-	-	-	34	340	17	13	9,5	4,7	MHBS605100*J#SA
12	30	45	42,5	1,2	37,5	-	34	408	14	13,5	10	5	MHBS605120*J#
12	30	45	42,5	1,2	37,5	20,3	34	408	18,5	14,5	10,5	4,4	MHBS605120*JSD
12	30	45	42,5	-	-	-	34	408	20	15,5	11,5	4,2	MHBS605120*\$\$
15	35	50	42	1,2	37,5	-	34	510	14	14	10,5	4,5	MHBS605150*J#
15	35	50	42	1,2	37,5	20,3	34	510	20	16,5	11,5	3,9	MHBS605150*JSD
15	35	50	42	-	-	-	34	510	22	18	12,5	3,7	MHBS605150*\$\$
20	30	45	57,5	1,2	52,5	-	23	460	14	13,5	10	4,8	MHBS605200*R#
20	30	45	57,5	1,2	52,5	20,3	23	460	19	15	11	4,2	MHBS605200*RSD
20	30	45	57,5	-	-	-	23	460	21	17	12,5	4	MHBS605200*\$\$

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
22	35	50	57,5	1,2	52,5	-	23	506	14	14	11	4,6	MHBS605220*R#
22	35	50	57,5	1,2	52,5	20,3	23	506	21	17	12	4	MHBS605220*RSD
22	35	50	57,5	-	-	-	23	506	23	18,5	13	3,8	MHBS605220*\$\$
25	35	50	57,5	1,2	52,5	-	23	575	14	14	12	4,4	MHBS605250*R#
25	35	50	57,5	1,2	52,5	20,3	23	575	22	17,5	12,5	3,8	MHBS605250*RSD
25	35	50	57,5	-	-	-	23	575	24	19,5	14	3,6	MHBS605250*\$\$
33	38	57,5	57,5	1,2	52,5	20,3	23	759	24,5	19,5	14,5	3,3	MHBS605330*RSD
33	38	57,5	57,5	1,2	52,5	10,2	23	759	25,5	20,5	15	3,1	MHBS605330*RST
33	38	57,5	57,5	-	-	-	23	759	27	21,5	16	3,1	MHBS605330*\$\$
35	38	57,5	57,5	1,2	52,5	20,3	23	805	25	20	14,5	3,2	MHBS605350*RSD
35	38	57,5	57,5	1,2	52,5	10,2	23	805	26	20,5	15	3	MHBS605350*RST
45 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	23	1035	27	23	16	2,8	MHBS605450*RSD ⁽⁶⁾
45 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	23	1035	29	23,5	16,5	2,7	MHBS605450*RST ⁽⁶⁾
45 ⁽⁶⁾	45	65	57,5	-	-	-	23	1035	31	25	17,5	2,7	MHBS605450*\$\$ ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "\$\$" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

- MKP • box with multiple radial or lug terminals • high energy density
- DC-Link • suitable for high Irms switching applications (*)
 - MHBM only: also suitable for AC applications (*)

(*) upon restrictions



MHBS70...: Ur = 1275Vdc; Upkr = 1465Vdc; Upk = 1655Vdc
Max. admissible voltage at +70°C (case) = 1400Vdc, Upkr = 1610Vdc, Upk = 1820Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
0,68	11	20	32	0,8	27,5	-	61	41,5	4	3	2,5	23	MHBS703680*H#
1	13	22	32	1	27,5	-	61	61	5	4	3	17,8	MHBS704100*H#
1,5	15	24,5	32	1	27,5	-	61	91,5	6	4,5	3,5	14	MHBS704150*H#
2	18	33	32	1,2	27,5	-	61	122	8	6,5	4,5	11,5	MHBS704200*H#
2,2	18	33	32	1,2	27,5	-	61	134,2	8,5	6,5	4,5	10,8	MHBS704220*H#
2,2	14	25	42,5	1,2	37,5	-	41	90,2	6,5	5	4	12,5	MHBS704220*J#
2,5	18	33	32	1,2	27,5	-	61	152,5	9	7	5	9,7	MHBS704250*H#
3	18	33	32	1,2	27,5	-	61	183	9,5	7,5	5,5	8,6	MHBS704300*H#
3	18	33	32	1,2	27,5	5,1	61	183	10,5	8,5	6	8	MHBS704300*HSD
3	17	28	42,5	1,2	37,5	-	41	123	8	6,5	5	10,1	MHBS704300*J#
3	17	28	42,5	-	-	-	41	123	9,5	7,5	5,5	9,3	MHBS704300*SS
3,3	22	37	32	1,2	27,5	-	61	201,3	11	8,5	6,5	8,1	MHBS704330*H#
3,3	22	37	32	1,2	27,5	10,2	61	201,3	12	9	6,5	7,5	MHBS704330*HSD
3,3	22	30	42,5	1,2	37,5	-	41	135,3	9	7,5	5,5	9,6	MHBS704330*J#
3,3	22	30	42,5	-	-	-	41	135,3	10,5	8,5	6	8,8	MHBS704330*SS
4	22	37	32	1,2	27,5	-	61	244	12	9,5	7	7,1	MHBS704400*H#
4	22	37	32	1,2	27,5	10,2	61	244	13,5	10,5	7,5	6,5	MHBS704400*HSD
4	22	30	42,5	1,2	37,5	-	41	164	10	8	6	8,7	MHBS704400*J#
4	22	30	42,5	-	-	-	41	164	11,5	9	6,5	7,9	MHBS704400*SS
4,7	22	33,5	42,5	1,2	37,5	-	41	192,7	10,5	8,5	6	7,9	MHBS704470*J#
4,7	22	33,5	42,5	1,2	37,5	5,1	41	192,7	11,5	9	6,5	7,3	MHBS704470*JSD
4,7	22	33,5	42,5	-	-	-	41	192,7	12,5	10	7,5	7,1	MHBS704470*SS
5	22	33,5	42,5	1,2	37,5	-	41	205	10,5	8,5	6,5	7,7	MHBS704500*J#
5	22	33,5	42,5	1,2	37,5	5,1	41	205	11,5	9	6,5	7,1	MHBS704500*JSD
5	22	33,5	42,5	-	-	-	41	205	12,5	10	7,5	6,9	MHBS704500*SS
6,8	24	44	41,5	1,2	37,5	-	41	278,8	13,5	11	8	6,5	MHBS704680*J#
6,8	24	44	41,5	1,2	37,5	10,2	41	278,8	14,5	11,5	8,5	5,9	MHBS704680*JSD
6,8 ⁽⁴⁾	24	44	41,5	-	-	-	41	278,8	16	12,5	9,5	5,7	MHBS704680*SS ⁽⁴⁾
7,5	24	44	41,5	1,2	37,5	-	41	307,5	14	11,5	8,5	6,1	MHBS704750*J#
7,5	24	44	41,5	1,2	37,5	10,2	41	307,5	16	12,5	9	5,5	MHBS704750*JSD
7,5 ⁽⁴⁾	24	44	41,5	-	-	-	41	307,5	17,5	13,5	10	5,3	MHBS704750*SS ⁽⁴⁾
7,5	28	37	42,5	1,2	37,5	-	41	307,5	13	10,5	7,5	6,1	MHBS704750*J#A
7,5	28	37	42,5	1,2	37,5	10,2	41	307,5	14,5	11,5	8	5,5	MHBS704750*JSDA
7,5	28	37	42,5	-	-	-	41	307,5	16	12,5	9	5,3	MHBS704750*SSA
10	30	45	42,5	1,2	37,5	-	41	410	14	13	9,5	5,1	MHBS705100*J#
10	30	45	42,5	1,2	37,5	20,3	41	410	18	14	10,5	4,5	MHBS705100*JSD
10	30	45	42,5	-	-	-	41	410	20	15,5	11,5	4,3	MHBS705100*SS
12	30	45	57,5	1,2	52,5	-	28	336	14	12,5	9	6	MHBS705120*R#
12	30	45	57,5	1,2	52,5	20,3	28	336	17	13,5	9,5	5,4	MHBS705120*RSD
12	30	45	57,5	-	-	-	28	336	18,5	14,5	10	5,2	MHBS705120*SS

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "SS" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
12,5	35	50	42	1,2	37,5	-	41	512,5	14	14	10,5	4,6	MHBS705125*J#
12,5	35	50	42	1,2	37,5	20,3	41	512,5	20	16	11	4	MHBS705125*JSD
12,5	35	50	42	-	-	-	41	512,5	22	17,5	12	3,8	MHBS705125*\$\$
15	30	45	57,5	1,2	52,5	-	28	420	14	13	10	5,4	MHBS705150*R#
15	30	45	57,5	1,2	52,5	20,3	28	420	18	14,5	10,5	4,8	MHBS705150*RSD
15	30	45	57,5	-	-	-	28	420	19,5	15,5	11,5	4,6	MHBS705150*\$\$
20	35	50	57,5	1,2	52,5	-	28	560	14	14	11,5	4,6	MHBS705200*R#
20	35	50	57,5	1,2	52,5	20,3	28	560	21,5	17,5	12	4	MHBS705200*RSD
20	35	50	57,5	-	-	-	28	560	23,5	19	13,5	3,8	MHBS705200*\$\$
25	38	57,5	57,5	1,2	52,5	20,3	28	700	23	19	13,5	3,6	MHBS705250*RSD
25	38	57,5	57,5	1,2	52,5	10,2	28	700	24	19,5	14	3,4	MHBS705250*RST
25	38	57,5	57,5	-	-	-	28	700	26	21	15	3,4	MHBS705250*\$\$
33 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	28	924	26,5	21,5	15	3,2	MHBS705330*RSD ⁽⁶⁾
33 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	28	924	27,5	22	15,5	3,1	MHBS705330*RST ⁽⁶⁾
33 ⁽⁶⁾	45	65	57,5	-	-	-	28	924	29	23,5	16,5	3,1	MHBS705330*\$\$ ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

• DC-Link • suitable for high Irms switching applications (*)

• MHBM only: also suitable for AC applications (*)

(*) upon restrictions



^(A)MHBM35...: Ur = 575Vdc; Urms = 230Vac⁽⁷⁾; Upkr = 660Vdc; Upk = 750Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
3	11	20	32	0,8	27,5	-	27	81	3,5	2,5	2	19,8	MHBM354300*H#
4,5	13	22	32	1	27,5	-	27	121,5	4,5	3,5	2,5	14,2	MHBM354450*H#
6	15	24,5	32	1	27,5	-	27	162	5,5	4,5	3	12	MHBM354600*H#
10	18	33	32	1,2	27,5	-	27	270	8,5	7	5	8,4	MHBM355100*H#
12	17	28	42,5	1,2	37,5	-	19	228	8	6,5	4,5	8,9	MHBM355120*J#
14	22	37	32	1,2	27,5	-	27	378	11	9	6	7	MHBM355140*H#
14	22	37	32	1,2	27,5	10,2	27	378	11,5	9,5	6,5	6,4	MHBM355140*HSD
15	22	30	42,5	1,2	37,5	-	19	285	9,5	7,5	5,5	7,7	MHBM355150*J#
18	22	33,5	42,5	1,2	37,5	-	19	342	10	8	5,5	6,9	MHBM355180*J#
18	22	33,5	42,5	1,2	37,5	10,2	19	342	11	9	6,5	6,3	MHBM355180*JSD
20	20	40	41,5	1,2	37,5	-	19	380	12	9,5	7	6,6	MHBM355200*J#
20	20	40	41,5	1,2	37,5	10,2	19	380	13	10,5	7,5	6	MHBM355200*JSD
25	28	37	42,5	1,2	37,5	-	19	475	12,5	10	7	5,9	MHBM355250*J#
25	28	37	42,5	1,2	37,5	10,2	19	475	13,5	11	7,5	5,3	MHBM355250*JSD
28,5	24	44	41,5	1,2	37,5	-	19	541,5	14	11,5	8	5,6	MHBM355285*J#
28,5	24	44	41,5	1,2	37,5	10,2	19	541,5	15,5	12,5	9	5	MHBM355285*JSD
30	30	45	42,5	1,2	37,5	-	19	570	14	12	8,5	5,4	MHBM355300*J#
30	30	45	42,5	1,2	37,5	20,3	19	570	16	13	9	4,8	MHBM355300*JSD
35	30	45	42,5	1,2	37,5	-	19	665	14	12,5	9	5,1	MHBM355350*J#
35	30	45	42,5	1,2	37,5	20,3	19	665	16,5	13,5	9,5	4,5	MHBM355350*JSD
40	35	50	42	1,2	37,5	-	19	760	14	14	10	4,7	MHBM355400*J#
40	35	50	42	1,2	37,5	20,3	19	760	19,5	15,5	11	4,1	MHBM355400*JSD
47	35	50	42	1,2	37,5	-	19	893	14	14	11	4,2	MHBM355470*J#
47	35	50	42	1,2	37,5	20,3	19	893	21	17	12	4,1	MHBM35537*JSD
50	30	45	57,5	1,2	52,5	-	12,5	625	14	12,5	8	4,8	MHBM355500*R#
50	30	45	57,5	1,2	52,5	20,3	12,5	625	16,5	13,5	9,5	5,4	MHBM355500*RSD
60	35	50	57,5	1,2	52,5	-	12,5	750	14	14	10	4,9	MHBM355600*R#
60	35	50	57,5	1,2	52,5	20,3	12,5	750	18,5	15	10,5	4,3	MHBM355600*RSD
70	35	50	57,5	1,2	52,5	-	12,5	875	14	14	10,5	4,7	MHBM355700*R#
70	35	50	57,5	1,2	52,5	20,3	12,5	875	19,5	16	11	4,1	MHBM355700*RSD
90	38	57,5	57,5	1,2	52,5	20,3	12,5	1125	22	18	12,5	3,7	MHBM355900*RSD
90	38	57,5	57,5	1,2	52,5	10,2	12,5	1125	23	18,5	13	3,5	MHBM355900*RST
120 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	12,5	1500	26,5	21,5	15	3,2	MHBM356120*RSD ⁽⁶⁾
120 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	12,5	1500	27,5	22,5	16	3,1	MHBM356120*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the “*” symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the “#” symbol with S for 5mm and L for 25mm leads length terminals; change the “\$” characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress

⁽⁷⁾ Not suitable for across the line applications

^(A) Available upon request



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



^(A)MHBM40...: Ur = 700Vdc; Urms = 275Vac⁽⁷⁾; Upkr = 805Vdc; Upk = 910Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
2,2	11	20	32	0,8	27,5	-	31	68	3,5	3	2	21,5	MHBM404220*H#
3,3	13	22	32	1	27,5	-	31	102	4,5	3,5	2,5	16	MHBM404330*H#
4,5	15	24,5	32	1	27,5	-	31	139,5	5,5	4,5	3	13	MHBM404450*H#
5	14	28	32	1,2	27,5	-	31	155	6,5	5	3,5	11,4	MHBM404500*H#
6,8	18	33	32	1,2	27,5	-	31	210,5	8	6,5	4,5	9,8	MHBM404680*H#
8	18	33	32	1,2	27,5	-	31	248	8,5	7	5	9	MHBM404800*H#
8,2	17	28	42,5	1,2	37,5	-	21	172	8	6,5	4,5	8,8	MHBM404820*J#
10	22	37	32	1,2	27,5	-	31	310	10	8	5,5	7,8	MHBM405100*H#
10	22	37	32	1,2	27,5	10,2	31	310	11	9	6	7,2	MHBM405100*HSD
12	22	37	32	1,2	27,5	-	31	372	11	9	6	6,9	MHBM405120*H#
12	22	37	32	1,2	27,5	10,2	31	372	11,5	9,5	6,5	6,3	MHBM405120*HSD
12	22	30	42,5	1,2	37,5	-	21	252	9	7,5	5	7,7	MHBM405120*J#
14	22	33,5	42,5	1,2	37,5	-	21	294	10,5	8,5	6	7	MHBM405140*J#
14	22	33,5	42,5	1,2	37,5	10,2	21	294	11	9	6,5	6,1	MHBM405140*JSD
16	20	40	41,5	1,2	37,5	-	21	336	12,5	10	7	6,3	MHBM405160*J#
16	20	40	41,5	1,2	37,5	10,2	21	336	13,5	11	7,5	5,7	MHBM405160*JSD
20	28	37	42,5	1,2	37,5	-	21	420	12,5	10	7	5,8	MHBM405200*J#
20	28	37	42,5	1,2	37,5	10,2	21	420	13,5	11	7,5	5,2	MHBM405200*JSD
22	24	44	41,5	1,2	37,5	-	21	462	14	12	8	5,4	MHBM405220*J#
22	24	44	41,5	1,2	37,5	10,2	21	462	15,5	13	9	4,8	MHBM405220*JSD
25	30	45	42,5	1,2	37,5	-	21	525	14	12,5	8,5	5,1	MHBM405250*J#
25	30	45	42,5	1,2	37,5	20,3	21	525	16,5	13,5	9,5	4,5	MHBM405250*JSD
33	35	50	42	1,2	37,5	-	21	693	14	14	11	4,5	MHBM405330*J#
33	35	50	42	1,2	37,5	20,3	21	693	20	16,5	11,5	3,9	MHBM405330*JSD
37,5	35	50	42	1,2	37,5	-	21	787,5	14	14	11,5	4,2	MHBM405375*J#
37,5	35	50	42	1,2	37,5	20,3	21	787,5	21,5	17,5	12	3,6	MHBM405375*JSD
40	30	45	57,5	1,2	52,5	-	14,5	580	14	12,5	8,5	5,4	MHBM405400*R#
40	30	45	57,5	1,2	52,5	20,3	14,5	580	21,5	17,5	12	4,8	MHBM405400*RSD
50	35	50	57,5	1,2	52,5	-	14,5	725	14	14	10,5	4,7	MHBM405500*R#
50	35	50	57,5	1,2	52,5	20,3	14,5	725	19,5	16	11	4,1	MHBM405500*RSD
55	35	50	57,5	1,2	52,5	-	14,5	797,5	14	14	10,5	4,6	MHBM405550*R#
55	35	50	57,5	1,2	52,5	20,3	14,5	797,5	20	16,5	11,5	4	MHBM405550*RSD
60	38	57,5	57,5	1,2	52,5	20,3	14,5	870	22	18	12,5	3,7	MHBM405600*RSD
60	38	57,5	57,5	1,2	52,5	10,2	14,5	870	22,5	18,5	13	3,5	MHBM405600*RST
70	38	57,5	57,5	1,2	52,5	20,3	14,5	1015	22,5	18,5	12,5	3,6	MHBM405700*RSD
70	38	57,5	57,5	1,2	52,5	10,2	14,5	1015	23,5	19,5	13,5	3,4	MHBM405700*RST
90 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	14,5	1305	26	21,5	15	3,3	MHBM405900*RSD ⁽⁶⁾
90 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	14,5	1305	26,5	22	15	3,2	MHBM405900*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress

⁽⁷⁾ Not suitable for across the line applications

^(A) Available upon request



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



^(A)MHBM45...: Ur = 800Vdc; Urms = 300Vac⁽⁷⁾; Upkr = 920Vdc; Upk = 1040Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
1,8	11	20	32	0,8	27,5	-	36	64,5	3,5	3	2	21,3	MHBM454180*H#
2,7	13	22	32	1	27,5	-	36	97	4,5	3,5	2,5	16	MHBM454270*H#
3,3	15	24,5	32	1	27,5	-	36	118,5	5	4	3	14,3	MHBM454330*H#
5	18	33	32	1,2	27,5	-	36	180	7	5,5	4	11,3	MHBM454500*H#
6,3	18	33	32	1,2	27,5	-	36	226,5	8	6,5	4,5	9,5	MHBM454680*H#
7	17	28	42,5	1,2	37,5	-	24	168	7	5,5	4	10,3	MHBM454700*J#
7,5	22	37	32	1,2	27,5	-	36	270	9,5	7,5	5,5	8,4	MHBM454750*H#
7,5	22	37	32	1,2	27,5	10,2	36	270	10	8	5,5	7,8	MHBM454750*HSD
9	22	37	32	1,2	27,5	-	36	324	10,5	8,5	6	7,5	MHBM4549000*H#
9	22	37	32	1,2	27,5	10,2	36	324	11	9	6,5	6,9	MHBM454900*HSD
10	22	30	42,5	1,2	37,5	-	24	240	9	7,5	5	8,4	MHBM455100*J#
12,5	20	40	41,5	1,2	37,5	-	24	300	11,5	9,5	6,5	7,4	MHBM455120*J#
12,5	20	40	41,5	1,2	37,5	10,2	24	300	12	10	7	6,8	MHBM455120*JSD
15	28	37	42,5	1,2	37,5	-	24	360	11,5	9,5	6,5	6,6	MHBM455150*J#
15	28	37	42,5	1,2	37,5	10,2	24	360	12,5	10	7	6	MHBM455150*JSD
17	28	37	42,5	1,2	37,5	-	24	408	12	10	6,5	6,3	MHBM455170*J#
17	28	37	42,5	1,2	37,5	10,2	24	408	13	10,5	7,5	5,7	MHBM455170*JSD
17,5	24	44	41,5	1,2	37,5	-	24	420	13,5	11	7,5	6,2	MHBM455175*J#
17,5	24	44	41,5	1,2	37,5	10,2	24	420	14,5	12	8	5,6	MHBM455175*JSD
22	30	45	42,5	1,2	37,5	-	24	528	14	12,5	8,5	5,4	MHBM455220*J#
22	30	45	42,5	1,2	37,5	20,3	24	528	16	13	9	4,8	MHBM455220*JSD
25	35	50	42	1,2	37,5	-	24	600	14	14	10	5,1	MHBM455250*J#
25	35	50	42	1,2	37,5	20,3	24	600	19	15,5	11	4,5	MHBM455250*JSD
30	35	50	42	1,2	37,5	-	24	720	14	14	11	4,5	MHBM455300*J#
30	35	50	42	1,2	37,5	20,3	24	720	20,5	17	11,5	3,9	MHBM455300*JSD
33	30	45	57,5	1,2	52,5	-	16,5	544,5	14	12,5	9	5,4	MHBM455330*R#
33	30	45	57,5	1,2	52,5	20,3	16,5	544,5	16,5	13,5	9,5	4,8	MHBM455330*RSD
40	35	50	57,5	1,2	52,5	-	16,5	660	14	14	10	5	MHBM455400*R#
40	35	50	57,5	1,2	52,5	20,3	16,5	660	18,5	15	10,5	4,4	MHBM455400*RSD
45	35	50	57,5	1,2	52,5	-	16,5	742,5	14	14	10	4,7	MHBM455450*R#
45	35	50	57,5	1,2	52,5	20,3	16,5	742,5	19,5	16	11	4,1	MHBM455450*RSD
50	38	57,5	57,5	1,2	52,5	20,3	16,5	825	21	17	12	4	MHBM455500*RSD
50	38	57,5	57,5	1,2	52,5	10,2	16,5	825	21,5	17,5	12,5	3,8	MHBM455500*RST
57,5	38	57,5	57,5	1,2	52,5	20,3	16,5	948,5	22	18	12,5	3,7	MHBM455575*RSD
57,5	38	57,5	57,5	1,2	52,5	10,2	16,5	948,5	23	19	13	3,5	MHBM455575*RST
68 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	16,5	1122	26	21,5	14,5	3,3	MHBM455680*RSD ⁽⁶⁾
68 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	16,5	1122	26,5	22	15	3,2	MHBM455680*RST ⁽⁶⁾
75 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	16,5	1237,5	27,5	22,5	15,5	3	MHBM455750*RSD ⁽⁶⁾
75 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	16,5	1237,5	28	23	16	2,9	MHBM455750*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress

⁽⁷⁾ Not suitable for across the line applications

^(A) Available upon request



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

• DC-Link • suitable for high Irms switching applications (*)

• MHBM only: also suitable for AC applications (*)

(*) upon restrictions



^(A)MHBM50...: Ur = 900Vdc; Urms = 330Vac⁽⁷⁾; Upkr = 1035Vdc; Upk = 1170Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
1,4	11	20	32	0,8	27,5	-	41,5	58	3,5	3	2	24	MHBM504140*H#
2	13	22	32	1	27,5	-	41,5	83	4	3	2	19,5	MHBM504200*H#
2,5	15	24,5	32	1	27,5	-	41,5	103,5	4,5	3,5	2,5	16,3	MHBM504250*H#
3,3	18	33	32	1,2	27,5	-	41,5	137	6,5	5,5	3,5	13,2	MHBM504330*H#
4,7	18	33	32	1,2	27,5	-	41,5	195	8	6,5	4,5	10,8	MHBM504470*H#
4,7	17	28	42,5	1,2	37,5	-	28	131,5	6,5	5,5	3,5	12,8	MHBM504700*J#
6,8	22	37	32	1,2	27,5	-	41,5	282	10,5	8,5	6	7,8	MHBM504680*H#
6,8	22	37	32	1,2	27,5	10,2	41,5	282	11	9	6	7,2	MHBM504680*HSD
8	22	30	42,5	1,2	37,5	-	28	224	8,5	7	5	9	MHBM504800*J#
9	22	33,5	42,5	1,2	37,5	-	28	252	9	7,5	5	8,5	MHBM504900*J#
9	22	33,5	42,5	1,2	37,5	10,2	28	252	9,5	8	5,5	7,9	MHBM504900*JSD
10	20	40	41,5	1,2	37,5	-	28	280	11	9	6	8,1	MHBM505100*J#
10	20	40	41,5	1,2	37,5	10,2	28	280	11,5	9,5	6,5	7,5	MHBM505100*JSD
12,5	28	37	42,5	1,2	37,5	-	28	350	11	9	6	7,6	MHBM505125*J#
12,5	28	37	42,5	1,2	37,5	10,2	28	350	12	10	6,5	7	MHBM505125*JSD
15	30	45	42,5	1,2	37,5	-	28	420	14	11,5	8	6,3	MHBM505150*J#
15	30	45	42,5	1,2	37,5	20,3	28	420	14,5	12	8,5	5,7	MHBM505150*JSD
17	30	45	42,5	1,2	37,5	-	28	476	14	12	8	6	MHBM505170*J#
17	30	45	42,5	1,2	37,5	20,3	28	476	15,5	13	9	5,4	MHBM505170*JSD
22	35	50	42	1,2	37,5	-	28	616	14	14	10	5	MHBM505220*J#
22	35	50	42	1,2	37,5	20,3	28	616	19,5	16	11	4,4	MHBM505220*JSD
22	30	45	57,5	1,2	52,5	-	18,5	407	14	11,5	8	6,7	MHBM505220*R#
22	30	45	57,5	1,2	52,5	20,3	18,5	407	14,5	12	8,5	6,1	MHBM505220*RSD
25	30	45	57,5	1,2	52,5	-	18,5	462,5	14	12	8	6,3	MHBM505250*R#
25	30	45	57,5	1,2	52,5	20,3	18,5	462,5	15,5	12,5	8,5	5,7	MHBM505250*RSD
30	35	50	57,5	1,2	52,5	-	18,5	555	14	14	9,5	5,4	MHBM505300*R#
30	35	50	57,5	1,2	52,5	20,3	18,5	555	18	15	10	4,8	MHBM505300*RSD
35	35	50	57,5	1,2	52,5	-	18,5	647,5	14	14	10	5	MHBM505350*R#
35	35	50	57,5	1,2	52,5	20,3	18,5	647,5	19	15,5	11	4,4	MHBM505350*RSD
40	38	57,5	57,5	1,2	52,5	20,3	18,5	740	21,5	17,5	12	4	MHBM505400*RSD
40	38	57,5	57,5	1,2	52,5	10,2	18,5	740	22	18	12,5	3,8	MHBM505400*RST
50 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	18,5	925	25	20,5	14	3,4	MHBM505500*RSD ⁽⁶⁾
50 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	18,5	925	25,5	21	14,5	3,3	MHBM505500*RST ⁽⁶⁾
60 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	18,5	1110	26	21	14,5	3,3	MHBM505600*RSD ⁽⁶⁾
60 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	18,5	1110	27	22	15,5	3,2	MHBM505600*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress

⁽⁷⁾ Not suitable for across the line applications

^(A) Available upon request



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions

^(A)MHBM55...: Ur = 1000Vdc; Urms = 380Vac⁽⁷⁾; Upkr = 1150Vdc; Upk = 1300Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
1,2	11	20	32	0,8	27,5	-	47	56	3,5	3	2	25	MHBM554120*H#
1,8	13	22	32	1	27,5	-	47	73,5	4	3	2	18,5	MHBM554180*H#
2	15	24,5	32	1	27,5	-	47	94	4,5	3,5	2,5	17,5	MHBM554200*H#
2,2	14	28	32	1,2	27,5	-	47	103,5	5,5	4,5	3	15,5	MHBM554220*H#
3,9	18	33	32	1,2	27,5	-	47	183,5	7,5	6	4	11	MHBM554390*H#
4,5	17	28	42,5	1,2	37,5	-	31	139,5	7	5,5	4	11,8	MHBM554450*J#
5	22	37	32	1,2	27,5	-	47	235	9	7	5	9,6	MHBM554500*H#
5	22	37	32	1,2	27,5	10,2	47	235	9,5	7,5	5,5	9	MHBM554500*HSD
5,6	22	37	32	1,2	27,5	-	47	263	9,5	7,5	5,5	9,1	MHBM554560*H#
5,6	22	37	32	1,2	27,5	10,2	47	263	10	8	5,5	8,5	MHBM554560*HSD
6,3	22	30	42,5	1,2	37,5	-	31	195	8	6,5	4,5	9,9	MHBM554630*J#
7,5	22	33,5	42,5	1,2	37,5	-	31	232,5	9	7,5	5	8,9	MHBM554750*J#
7,5	22	33,5	42,5	1,2	37,5	10,2	31	232,5	9,5	8	5,5	8,3	MHBM554750*JSD
8,2	20	40	41,5	1,2	37,5	-	31	254	10,5	8,5	6	8,5	MHBM554820*J#
8,2	20	40	41,5	1,2	37,5	10,2	31	254	11	9	6	7,9	MHBM554820*JSD
10	28	37	42,5	1,2	37,5	-	31	310	11	9	6	7,5	MHBM555100*J#
10	28	37	42,5	1,2	37,5	10,2	31	310	12	10	6,5	6,9	MHBM555100*JSD
11,5	24	44	41,5	1,2	37,5	-	31	356,5	13	10,5	7,5	6,9	MHBM555115*J#
11,5	24	44	41,5	1,2	37,5	10,2	31	356,5	14	11,5	8	6,3	MHBM555115*JSD
14	30	45	42,5	1,2	37,5	-	31	434	14	12	8	6,1	MHBM555140*J#
14	30	45	42,5	1,2	37,5	20,3	31	434	15	12,5	8,5	5,5	MHBM555140*JSD
20	35	50	42	1,2	37,5	-	31	620	14	14	10	5,1	MHBM555200*J#
20	35	50	42	1,2	37,5	20,3	31	620	19	15,5	11	4,5	MHBM555200*JSD
20	30	45	57,5	1,2	52,5	-	21	420	14	12	8	6,4	MHBM555200*R#
20	30	45	57,5	1,2	52,5	20,3	21	420	15,5	12,5	8,5	5,8	MHBM555200*RSD
25	35	50	57,5	1,2	52,5	-	21	525	14	13,5	9,5	5,7	MHBM555250*R#
25	35	50	57,5	1,2	52,5	20,3	21	525	17,5	14,5	10	5,1	MHBM555250*RSD
28	35	50	57,5	1,2	52,5	-	21	588	14	14	9,5	5,4	MHBM555280*R#
28	35	50	57,5	1,2	52,5	20,3	21	588	18	14,5	10	4,8	MHBM555280*RSD
35	38	57,5	57,5	1,2	52,5	20,3	21	735	21	17	12	4,2	MHBM555350*RSD
35	38	57,5	57,5	1,2	52,5	10,2	21	735	21,5	17,5	12,5	4	MHBM555350*RST
45 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	21	945	24	19,5	13,5	3,8	MHBM555450*RSD ⁽⁶⁾
45 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	21	945	25	20,5	14	3,7	MHBM555450*RST ⁽⁶⁾
50 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	21	1050	25	20,5	14	3,6	MHBM555500*RSD ⁽⁶⁾
50 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	21	1050	25,5	21	14,5	3,5	MHBM555500*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress

⁽⁷⁾ Not suitable for across the line applications

^(A) Available upon request



MHBS / MHBM *Extended and upgraded*

MKP • box with multiple radial or lug terminals • high energy density

• DC-Link • suitable for high Irms switching applications (*)

• MHBM only: also suitable for AC applications (*)

(*) upon restrictions



^(A)MHBM60...: Ur = 1100Vdc; Urms = 400Vac⁽⁷⁾; Upkr = 1265Vdc; Upk = 1430Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾ -
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
1	11	20	32	0,8	27,5	-	50	50	3,5	3	2	25	MHBM604100*H#
1,5	13	22	32	1	27,5	-	50	75	4	3	2	19	MHBM604150*H#
1,8	15	24,5	32	1	27,5	-	50	90	4,5	3,5	2,5	16,5	MHBM604180*H#
2	14	28	32	1,2	27,5	-	50	100	5,5	4,5	3	15	MHBM604200*H#
3,3	18	33	32	1,2	27,5	-	50	165	7,5	6	4	11,1	MHBM604330*H#
3,9	17	28	42,5	1,2	37,5	-	34	132,5	6,5	5,5	3,5	12,1	MHBM604390*J#
4	22	37	32	1,2	27,5	-	50	200	9	7	5	9,6	MHBM604400*H#
4	22	37	32	1,2	27,5	10,2	50	200	9,5	8	5,5	9	MHBM604400*HSD
4,7	22	37	32	1,2	27,5	-	50	235	9,5	7,5	5,5	8,8	MHBM604470*H#
4,7	22	37	32	1,2	27,5	10,2	50	253	10	8	5,5	8,2	MHBM604470*HSD
5	22	30	42,5	1,2	37,5	-	34	170	8	6,5	4,5	9,8	MHBM604500*J#
6	22	33,5	42,5	1,2	37,5	-	34	204	9	7	5	8,7	MHBM604600*J#
6	22	33,5	42,5	1,2	37,5	10,2	34	204	9,5	7,5	5,5	8,1	MHBM604600*JSD
6,8	20	40	41,5	1,2	37,5	-	34	231	10,5	8,5	6	8,3	MHBM604680*J#
6,8	20	40	41,5	1,2	37,5	10,2	34	231	11	9	6,5	7,7	MHBM604680*JSD
9	28	37	42,5	1,2	37,5	-	34	306	12	10	6,5	6,8	MHBM604900*J#
9	28	37	42,5	1,2	37,5	10,2	34	306	12,5	10,5	7	6,2	MHBM604900*JSD
10	24	44	41,5	1,2	37,5	-	34	340	13,5	11	7,5	6,5	MHBM605100*J#
10	24	44	41,5	1,2	37,5	10,2	34	340	14	11,5	8	5,9	MHBM605100*JSD
12	30	45	42,5	1,2	37,5	-	34	408	14	12	8	5,9	MHBM605120*J#
12	30	45	42,5	1,2	37,5	20,3	34	408	15,5	12,5	9	5,3	MHBM605120*JSD
15	35	50	42	1,2	37,5	-	34	510	14	14	10	5,3	MHBM605150*J#
15	35	50	42	1,2	37,5	20,3	34	510	18,5	15	10,5	4,7	MHBM605150*JSD
15	30	45	57,5	1,2	52,5	-	23	345	14	11,5	8	6,6	MHBM605150*R#
15	30	45	57,5	1,2	52,5	20,3	23	345	14,5	12	8	6	MHBM605150*RSD
18	30	45	57,5	1,2	52,5	-	23	414	14,5	12	8	6	MHBM605180*R#
18	30	45	57,5	1,2	52,5	20,3	23	414	15,5	12,5	8,5	5,4	MHBM605180*RSD
22	35	50	57,5	1,2	52,5	-	23	506	14	14	9,5	5,5	MHBM605220*R#
22	35	50	57,5	1,2	52,5	20,3	23	506	18	14,5	10	4,9	MHBM605220*RSD
30	38	57,5	57,5	1,2	52,5	20,3	23	690	21	17	12	4,1	MHBM605300*RSD
30	38	57,5	57,5	1,2	52,5	10,2	23	690	21,5	17,5	12,5	4,3	MHBM605300*RST
35 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	23	805	24	19,5	13,5	3,9	MHBM605350*RSD ⁽⁶⁾
35 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	23	805	21,5	17,5	12,5	3,8	MHBM605350*RST ⁽⁶⁾
42,5 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	23	977,5	25	20,5	14	3,5	MHBM605425*RSD ⁽⁶⁾
42,5 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	23	977,5	25,5	21	14,5	3,4	MHBM605425*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress

⁽⁷⁾ Not suitable for across the line applications

^(A) Available upon request



MHBS / MHBM *Extended and upgraded*

- MKP • box with multiple radial or lug terminals • high energy density
- DC-Link • suitable for high Irms switching applications (*)
- MHBM only: also suitable for AC applications (*)

(*) upon restrictions



^(A)MHBM70...: Ur = 1275Vdc; Urms = 415Vac⁽⁷⁾; Upkr = 1465Vdc; Upk = 1655Vdc

Cn μF	Dimensions (mm)						du/dt V/μs	Ipeak A	Irms max. ⁽¹⁾			ESR ⁽²⁾ mΩ	ICEL CODE ⁽³⁾
	B	H	L	d	P	P1			A (ΔT=+15°C)	A (ΔT=+10°C)	A (ΔT=+5°C)		
0,68	11	20	32	0,8	27,5	-	61	41,5	3	2,5	1,5	28	MHBM703680*H#
1	13	22	32	1	27,5	-	61	61	4	3	2	21,5	MHBM704100*H#
1,3	15	24,5	32	1	27,5	-	61	79	4,5	3,5	2,5	18,1	MHBM704130*H#
1,5	14	28	32	1,2	27,5	-	61	91,5	5,5	4,5	3	16,3	MHBM704150*H#
2,2	18	33	32	1,2	27,5	-	61	134	7	5,5	4	13	MHBM704220*H#
2,5	18	33	32	1,2	27,5	-	61	152,5	7,5	6	4	11,7	MHBM704250*H#
2,5	17	28	42,5	1,2	37,5	-	41	102,5	6	5	3,5	16	MHBM704250*J#
3,3	22	37	32	1,2	27,5	-	61	201	9,5	7,5	5,5	9,8	MHBM704330*H#
3,3	22	37	32	1,2	27,5	10,2	61	201	10	8	5,5	9,2	MHBM704330*HSD
3,3	22	30	42,5	1,2	37,5	-	41	135	7,5	6	4	11,7	MHBM704330*J#
3,9	22	30	42,5	1,2	37,5	-	41	160	8	6,5	4,5	10,6	MHBM704390*J#
5	20	40	41,5	1,2	37,5	-	41	205	10	8	5,5	9,2	MHBM704500*J#
5	20	40	41,5	1,2	37,5	10,2	41	205	10,5	8,5	6	8,6	MHBM704500*JSD
6	28	37	42,5	1,2	37,5	-	41	246	10	8	5,5	8,3	MHBM704600*J#
6	28	37	42,5	1,2	37,5	10,2	41	246	10,5	8,5	6	7,5	MHBM704600*JSD
6,8	24	44	41,5	1,2	37,5	-	41	278,5	12,5	10	7	7,7	MHBM704680*J#
6,8	24	44	41,5	1,2	37,5	10,2	41	278,5	13	10,5	7,5	7,1	MHBM704680*JSD
7,5	30	45	42,5	1,2	37,5	-	41	307,5	13	10,5	7,5	7,2	MHBM704750*J#
7,5	30	45	42,5	1,2	37,5	20,3	41	307,5	13,5	11	7,5	6,6	MHBM704750*JSD
9	30	45	42,5	1,2	37,5	-	41	369	14	11	8	6,3	MHBM704900*J#
9	30	45	42,5	1,2	37,5	20,3	41	369	15	12	8,5	5,7	MHBM704900*JSD
10	35	50	42	1,2	37,5	-	41	410	14	13	9	6	MHBM705100*J#
10	35	50	42	1,2	37,5	20,3	41	410	17	14	9,5	5,4	MHBM705100*JSD
12	35	50	42	1,2	37,5	-	41	492	14	14	10	5,5	MHBM705120*J#
12	35	50	42	1,2	37,5	20,3	41	492	18,5	15	10,5	4,9	MHBM705120*JSD
12	30	45	57,5	1,2	52,5	-	28	336	13,5	11	7,5	7,1	MHBM705120*R#
12	30	45	57,5	1,2	52,5	20,3	28	336	14,5	12	8	6,5	MHBM705120*RSD
15	35	50	57,5	1,2	52,5	-	28	420	14	12,5	8,5	6,4	MHBM705150*R#
15	35	50	57,5	1,2	52,5	20,3	28	420	16	13	9	5,8	MHBM705150*RSD
18	35	50	57,5	1,2	52,5	-	28	504	14	13,5	9,5	5,7	MHBM705180*R#
18	35	50	57,5	1,2	52,5	20,3	28	504	17,5	14,5	10	5,1	MHBM705180*RSD
22	38	57,5	57,5	1,2	52,5	20,3	28	616	19,5	16	11	4,8	MHBM705220*RSD
22	38	57,5	57,5	1,2	52,5	10,2	28	616	20	16,5	11,5	4,6	MHBM705220*RST
30 ⁽⁶⁾	45	65	57,5	1,2	52,5	20,3	28	840	24	19,6	13,5	4	MHBM705300*RSD ⁽⁶⁾
30 ⁽⁶⁾	45	65	57,5	1,2	52,5	10,2	28	840	24,5	20	14	3,9	MHBM705300*RST ⁽⁶⁾

⁽¹⁾ at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; Irms rating for ΔT/Ta (Ta = T ambient) = +15°C typical is the absolute max. Irms applicable (ratings limited by terminals type and execution); for lug terminals execution, the power dissipation capability is calculated considering all the box walls and sealing surface able to dissipate and not in contact with any surface; Irms values are referred to max. tolerance on rated Capacitance = ±10%, for wider C tolerances, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽²⁾ typical value at f = 10kHz÷60kHz for P = 27.5mm, at f = 10kHz÷45kHz for P = 37.5mm, at f = 10kHz÷30kHz for P = 52.5mm; for operating frequency out of the range, ESR variation from typical data and related different power dissipation must be taken in consideration

⁽³⁾ change the "*" symbol with the desired capacitance tolerance code (±5% = J; ±10% = K); change the "#" symbol with S for 5mm and L for 25mm leads length terminals; change the "\$\$" characters with the desired lug style code

⁽⁴⁾ Upon request only

⁽⁵⁾ Not available with tolerance on capacitance < ±10%

⁽⁶⁾ In progress

⁽⁷⁾ Not suitable for across the line applications

^(A) Available upon request

Warning: this specification must be completed with the data given in the "General technical information" chapter