MHJ

MHB

мvн

Lower ESR

Lower ESR

Alchip[™]-

ESR : Less than MVH

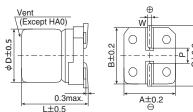
- ■Endurance : 1,500 to 3,000 hours at 125°C
- Rated voltage range : 10 to 100V
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- OVibration resistant structure
- RoHS2 Compliant
- ●AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | |
|-------------------------------|---|--|---|----------|----------|-----------|---|---------|---------|---|--|
| Category Temperature Range | -40 to +125℃ | | | | | | | | | | |
| Rated Voltage Range | 10 to 100V _{dc} | | | | | | | | | | |
| Capacitance Tolerance | ±20%(M) | | | | | | | | | | (at 20°C, 120Hz) |
| Leakage Current | HA0 & JA0 | I=0.01CV | | | | | | | | | |
| [| KE0 to MN0 | I=0.03CV | | | | | | | | | |
| | | Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes) | | | | | | | | | |
| Dissipation Factor | Rated Volta | ge (V _{dc}) | 10V | 16V | 25V | 35V | 50V | 63V | 80V | 100V | |
| $(\tan \delta)$ | ton & (Mox) | HA0 & JA0 | 0.24 | 0.20 | 0.16 | 0.14 | - | - | - | - | |
| | tanδ (Max.) | KE0 to MN0 | - | - | 0.14 | 0.12 | 0.10 | 0.10 | 0.08 | 0.08 | |
| | When nomi | nal capacitance exce | eds 1, | 000µF, | add 0 | 02 to t | he valu | ie abov | e for e | ach 1,0 | - 000μF increase. (at 20°C, 120Hz) |
| Low Temperature | Rated Volta | ge (V _{dc}) | 10V | 16V | 25V | 35V | 50V | 63V | 80V | 100V | |
| Characteristics | | Z(-25°C)/Z(+20°C) | 3 | 2 | 2 | 2 | - | - | - | - | |
| (Max. impedance Ratio) | HA0 & JA0 | Z(-40°C)/Z(+20°C) | 4 | 3 | 3 | 3 | - | _ | _ | - | 1 |
| | KE0 to MN0 | Z(-25°C)/Z(+20°C) | - | - | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| | KEU to IVINU | Z(-40°C)/Z(+20°C) | - | - | 4 | 4 | 4 | 4 | 4 | 4 | (at 120Hz) |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is | | | | | | stored to 20°C after the rated voltage is applied | | | | |
| | HA0 & JA0 | for 2,000 hours at 125°C. | | | | | | | | | |
| | | Capacitance change | ≦±; | 30% of | the ini | tial valu | le | | | | |
| | | D.F. (tan δ) | ≦30 | 0% of t | he initi | al spec | ified va | alue | | | |
| | | Leakage current | | e initia | | | | | | | |
| | | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the | | | | | | | | | |
| | KE0 to MN0 | rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for the specified period of time at 125°C. | | | | | | | | | |
| | | | | & KG5 | | , | Ohours | | | | |
| | | Time | Time LH0 & MH0 : 2,000hours KN0 & LN0 & MN0 : 3,000hours | | | | | | | | |
| | | Osassitanas sharas | | | | | | 5 | | | |
| | | Capacitance change | · · · · · · · · · · · · · · · · · · · | | | | | | | | |
| | | D.F. (tan δ) | | | | | | aiue | | | |
| Shelf Life | The fellowing | Leakage current | | e initia | | | | reaters | d to 00 | °C | r expecting them for 1,000 hours at 105% |
| Shen Lite | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. | | | | | | | | | | |
| | <u> </u> | f the initial value | | | | | | u by a | ppiying | volage according to item 4.1 01 010 C 5101-4. | |
| | | | the initial specified value | | | | | | | | |
| | Leakage cu | | initial specified value | | | | | | | | |

DIMENSIONS [mm]

- Terminal Code : A
- Size code : HA0 to MN0



PART NUMBERING SYSTEM

• Terminal Code : G(Vibration resistant structure)

 Size code : HA0 to MN0 Size code ϕD L A В С ⊕ HA0 8 10.0 8.3 8.3 9.0 Vent (Except HA0) 0.3max. W JA0 10 10.0 10.3 10.3 11.0 0.7 to 1.1 4.5 KE0 13.5 13.0 13.0 13.7 12.5 φ D±0.5 16.0 13.0 13.0 13.7 1.0 to 1.3 4.2 KG5 12.5 B±0.2 C±0.2 ç ے KN0 21.5 13.0 13.0 13.7 12.5 16.5 17.0 17.0 18.0 1.0 to 1.3 6.5 LH0 16 Og 0 16 21.5 17.0 17.0 18.0 1.0 to 1.3 6.5 LN0 16.5 19.0 19.0 20.0 1.0 to 1.3 6.5 мно 18 1 ± 0.5 A±0.2 MN0 18 21.5 19.0 19.0 20.0 1.0 to 1.3 6.5

Supplement code

Taping.Tray code Terminal code (A, G)

Capacitance tolerance code

Capacitance code (ex. 47µF:470,100µF:101)

Voltage code (ex. 35V:350,100V:101)

Size code

Series code Category

Product specifications in this catalog are subject to change without notice. Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

: Dummy terminals



| Rated voltage | e syn | nbol | (HA | 0, J <i>I</i> | 40) |
|-----------------------------------|-------|------|-----|---------------|-----|
| Rated voltage (Vdc) | 10 | 16 | 25 | 35 |] |
| Symbol | Α | С | Е | V | |
| | | | | | - |

Please refer to "Product code guide (surface mount type)"

W

0.7 to 1.1

1.0 to 1.3

1.0 to 1.3

3.1

4.2

4.2

Alchip[™]-MHB_{Series}

♦STANDARD RATINGS

| W(y_a) Cip Size (p) (p) Cip (p) (p) <th< th=""><th colspan="2" rowspan="3">Part No.</th></th<> | Part No. | |
|---|------------|--|
| In 20°C -40°C 20°C -40°C -40°C 10 330 HA0 0.3 3.0 6.0 240 EMHB100 PU 16 100 HA0 0.3 3.0 6.0 240 EMHB100 PU 220 HA0 0.3 3.0 6.0 240 EMHB100 PU 330 JA0 0.2 2.0 - 6.0 240 EMHB20 PU 330 JA0 0.2 2.0 - - 4.5 330 EMHB20 PU 100 K65 0.060 0.30 0.37 7 1.320 EMHB20 PU 100 K65 0.060 0.28 0.28 3.4 - 1.470 EMHB20 PU 100 K65 0.058 0.28 0.28 3.2 8 - 2.000 EMHB20 PU 1. | | |
| 10 470 JAO 0.2 2.0 - - 4.5 330 EMHB100 R/ 16 100 HAO 0.3 3.0 - - 6.0 240 EMHB160 R/ 220 HAO 0.3 3.0 - - 6.0 240 EMHB160 R/ 330 JAO 0.3 3.0 - - 6.0 240 EMHB250 R/ 330 JAO 0.2 2.0 - - 4.5 330 EMHB250 R/ 100 KGS 0.056 0.28 0.28 3.4 - 1.470 EMHB250 R/ 1,600 LH0 0.047 0.22 0.21 0.18 2.29 - 1.820 EMHB250 R/ 2,700 LN0 0.034 0.17 0.10 1.3 - 2.200 EMHB250 R/ 3,300 MNO 0.034 0.17 0.10 | | |
| 470 JA0 0.2 2.0 - - 4.5 330 EMMB100 H/F 16 100 HA0 0.3 3.0 - - 6.0 240 EMMB100 H/F 220 HA0 0.3 3.0 - - 6.0 240 EMMB250 R/F 330 JA0 0.2 2.0 - - 6.0 240 EMHB250 R/F 330 JA0 0.2 2.0 - - 4.5 330 EMHB250 R/F 330 JA0 0.2 2.0 - - 4.5 330 EMHB250 R/F 100 K65 0.060 0.28 0.28 3.4 - 1.470 EMHB250 R/F 100 LH0 0.047 0.24 0.24 2.9 - 1.820 EMHB250 R/F 200 LH0 0.033 3.0 - - 6.0 2.400 | RA331MHA0G | |
| 16 220 HAQ 0.3 3.0 - - 6.0 240 EMMBSO TRO 220 HAQ 0.3 3.0 - - 6.0 240 EMHBSO TR 330 JAQ 0.2 2.0 - - 4.5 3.0 EMHBSO TR 330 JAQ 0.2 2.0 - - 4.5 3.0 EMHBSO TR 1100 KGS 0.060 0.30 0.30 3.7 - 1.320 EMHBSO TR 1500 K(ND) 0.044 (0.22) (0.18) (2.2) - (1.620) EMHBSO TR 1600 LHO 0.047 0.24 0.24 2.9 - 1.820 EMHBSO TR 2700 LN0 0.034 0.17 0.10 1.3 - 2.280 EMHBSO TR 3,00 MNO 0.032 0.16 0.090 0.60 - 4.45 3.30 EMHBSO TR 100 JAO | RA471MJA0G | |
| 220 HA0 0.3 3.0 - - - 0.0 240 EMHB100 FMB1100 220 HA0 0.3 3.0 - - - 6.0 240 EMHB250 R 330 JA0 0.2 2.0 - - - 4.5 330 EMHB250 R 820 KE0 0.066 0.30 0.30 3.7 - 1.320 EMHB250 R 1100 KG5 0.056 0.28 0.28 3.4 - 1.470 EMHB250 R 1100 KG5 0.047 0.24 0.21 0.18 (2.2) - (1.600 EMHB250 R 2,700 LN0 0.034 0.17 0.10 1.3 - 2.280 EMHB250 R 47 HA0 0.3 3.0 - - 6.0 240 EMHB250 R 100 JA0 0.2 2.0 | | |
| 220 HA0 0.3 3.0 - - - 6.0 240 EMHESSO F/L 330 JAO 0.2 2.0 - - 4.5 330 EMHESSO F/L 820 KEO 0.060 0.30 0.30 3.7 - 1,320 EMHESSO F/L 1,100 KG5 0.056 0.28 0.28 3.4 - 1,470 EMHESSO F/L 1,600 L(N0) (0.044) (0.22) (0.18) (2.2) - 1,820 EMHESSO F/L 2,700 LN0 0.034 0.17 0.10 1.3 - 2,280 EMHESSO F/L 3,300 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHESSO F/L 3,300 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHESSO F/L 100 HA0 0.3 3.0 - - - 4.5 330 EMHESSO F/L 100 </td <td></td> | | |
| 330 JA0 0.2 2.0 - - 4.5 330 EMH8250 R/ 820 KE0 0.060 0.30 0.37 - 1,320 EMH8250 R/ 1,100 KK65 0.056 0.28 0.28 3.4 - 1,470 EMH8250 R/ 1,600 LH0 0.047 0.24 0.22 2.9 - 1,820 EMH8250 R/ 2,000 MH0 0.047 0.23 0.23 2.28 - 2,000 EMH8250 R/ 3,300 MN0 0.032 0.16 0.090 0.60 - 2,490 EMH8250 R/ 3,300 MN0 0.032 0.16 0.090 0.60 - 2,490 EMH8250 R/ 3,300 MN0 0.032 0.16 0.90 0.60 - 2,490 EMH8250 R/ 3,300 MN0 0.022 2.0 - - 4.5 <t< td=""><td></td></t<> | | |
| 820 KE0 0.060 0.30 0.30 3.7 1.320 EMH8250 P//// 1,100 KG5 0.066 0.28 0.28 3.4 1.470 EMH8250 P//// 1,500 L(N0) 0.044 0.22 (0.18) (2.2) 1.820 EMH8250 P//// 2,200 MH0 0.045 0.23 0.28 2.8 - 2.000 EMH8250 P//// 3,300 MN0 0.032 0.16 0.090 0.60 - 2.490 EMH8250 P//// 3,300 MN0 0.032 0.16 0.090 0.60 - 2.400 EMH8250 P//// 100 HA0 0.3 3.0 - - 6.0 240 EMH8350 P//// 100 HA0 0.3 3.0 - - 4.5 330 EMH8350 P//// 220 JA0 0.2 2.0 - - | | |
| 25 1,100 KG5 0.066 0.28 0.28 3.4 1,470 EMH8250 T 1,500 (KN0) (0.044) (0.22) (0.18) (2.2) (1.620) (EMH8250) T 2,200 MH0 0.047 0.23 0.23 2.8 2.000 EMH8250) T 3,300 MN0 0.032 0.16 0.090 0.60 2.480 EMH8250) T 3,300 MN0 0.032 0.16 0.090 0.60 2.490 EMH8250) T 100 HA0 0.3 3.0 - - - 6.0 240 EMH8350) T 100 JA0 0.2 2.0 - - - 4.5 330 EMH8350) T 100 JA0 0.2 2.0 - - 1.320 EMH8350 T 100 JA0 0.2 2.0 - | | |
| 25 (1,500) (KN0) (0.044) (0.22) (0.18) (2.2) (1,620) [EMHB250] Tr 1,600 LH0 0.047 0.24 0.24 2.9 1,820 EMHB250] Tr 2,200 MH0 0.045 0.23 2.8 2,000 EMHB250] Tr 3,300 MN0 0.032 0.16 0.090 0.60 2,490 EMHB250] Tr 3,300 MN0 0.33 3.0 6.0 240 EMHB350] Tr 100 HA0 0.3 3.0 4.5 330 EMHB350] Tr 100 HA0 0.2 2.0 - - 4.5 330 EMHB350] Tr 220 JA0 0.2 2.0 - - 4.5 330 EMHB350] Tr 100 HA0 0.22 2.0 - - 1,470 EMHB350] Tr 1000 LH0 0.047 0 | | |
| 1.600 LH0 0.045 0.24 0.24 2.9 - 1.820 EMHB250 FV 2.200 MH0 0.045 0.23 0.23 2.8 - 2.000 EMHB250 FV 3.300 MN0 0.032 0.16 0.090 0.60 - 2.490 EMHB250 FV 47 HA0 0.3 3.0 - - 6.0 240 EMHB250 FV 100 HA0 0.3 3.0 - - 4.5 330 EMHB350 FV 100 JAO 0.2 2.0 - - 4.5 330 EMHB350 FV 220 JAO 0.2 2.0 - - 4.5 330 EMHB350 FV 560 KG5 0.060 0.30 0.30 3.7 - 1.320 EMHB350 FV 1,000 LH0 0.047 0.24 0.29 - 1.470 EMHB350 | | |
| 2.200 MH0 0.045 0.23 0.23 2.8 - 2.000 EMH8250 R 2.700 LN0 0.034 0.17 0.10 1.3 - 2.280 EMH8250 R 3.300 MN0 0.032 0.16 0.090 0.60 - 2.2490 EMH8250 R 100 JA0 0.2 2.0 - - 6.0 240 EMH8350 R 100 JA0 0.2 2.0 - - 4.5 330 EMH8350 R 220 JA0 0.2 2.0 - - 4.5 330 EMH8350 R 560 KED 0.060 0.30 0.30 3.7 - 1.320 EMH8350 R 1000 LH0 0.047 0.24 0.23 2.8 - 2.000 EMH8350 R 1,600 LN0 0.034 0.17 0.10 1.3 - 2.2490 | , , | |
| 2.700 LN0 0.034 0.17 0.10 1.3 - 2.280 EMHB250 R/ 3.300 MN0 0.032 0.16 0.090 0.60 - 2.490 EMHB250 R/ 47 HA0 0.3 3.0 - - 6.0 240 EMHB350 R/ 100 HA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 220 JA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 560 KE0 0.060 0.30 0.30 3.7 - 1,320 EMHB350 R/ 680 KG5 0.066 0.28 0.28 3.4 - 1,470 EMHB350 R/ 1,000 LH0 0.047 0.24 0.24 2.9 - 1,820 EMHB350 R/ 1,300 MH0 0.032 0.16 0.090 0.60 - <td< td=""><td></td></td<> | | |
| 3,300 MN0 0.032 0.16 0.090 0.60 2,490 EMHB250 P// 47 HA0 0.3 3.0 6.0 240 EMHB350 P/ 100 HA0 0.3 3.0 6.0 240 EMHB350 P/ 100 JA0 0.2 2.0 4.5 330 EMHB350 P/ 220 JA0 0.2 2.0 4.5 330 EMHB350 P/ 220 JA0 0.2 2.0 4.5 330 EMHB350 P/ 200 KE0 0.066 0.28 0.28 3.4 1.470 EMHB350 P/ 1,000 LH0 0.047 0.22 (0.18) (2.2) (1.620) (EMHB350 P/ 1,300 MH0 0.032 0.16 0.090 0.60 | | |
| 47 HA0 0.3 3.0 - - 6.0 240 EMHB350 R/ 100 HA0 0.3 3.0 - - 6.0 240 EMHB350 R/ 100 JA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 220 JA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 560 KG5 0.056 0.28 0.28 3.4 - 1,320 EMHB350 R/ (910) (KN0) (0.044) (0.22) (0.18) (2.2) - (1,620) (EMHB350 R/ 1,000 LN0 0.034 0.17 0.10 1.3 - 2,200 EMHB350 R/ 1,600 LN0 0.034 0.17 0.10 1.3 - 2,280 EMHB350 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - | | |
| 100 HA0 0.3 3.0 - - 6.0 240 EMHB350 R/ 100 JA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 220 JA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 560 KE0 0.060 0.30 0.30 3.7 - 1,320 EMHB350 R/ (910) (KN0) (0.044) (0.22) (0.18) (2.2) - (1,620) (EMHB350 R/ 1,000 LH0 0.047 0.24 0.24 2.9 - 1,820 EMHB350 R/ 1,000 LH0 0.045 0.23 0.23 2.8 - 2,000 EMHB350 R/ 1,000 LH0 0.034 0.17 0.10 1.3 - 2,280 EMHB350 R/ 1,600 LN0 0.032 0.16 0.090 0.60 - <td></td> | | |
| 100 JA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 220 JA0 0.2 2.0 - - 4.5 330 EMHB350 R/ 560 KE0 0.060 0.30 0.30 3.7 - 1,320 EMHB350 R/ 680 KG5 0.056 0.28 0.28 3.4 - 1,470 EMHB350 R/ 1,000 LH0 0.044 0.24 2.9 - 1,820 EMHB350 R/ 1,000 LH0 0.045 0.23 0.23 2.8 - 2,000 EMHB350 R/ 1,000 LN0 0.034 0.17 0.10 1.3 - 2,280 EMHB350 R/ 2,200 MN0 0.032 0.16 0.900 0.60 - 2,490 EMHB350 R/ 4,00 0.11 0.55 0.55 6.6 - 980 EMHB500 | | |
| 220 JA0 0.2 2.0 4.5 330 EMHB350 R/ 550 KE0 0.060 0.30 0.30 3.7 1,320 EMHB350 R/ 680 KG5 0.056 0.28 0.28 3.4 1,470 EMHB350 R/ (910) (KN0) (0.044) (0.22) (0.18) (2.2) - (1,620) (EMHB350) R/ 1,300 MH0 0.045 0.23 0.23 2.8 - 2,000 EMHB350 R/ 1,600 LN0 0.034 0.17 0.10 1.3 - 2,280 EMHB350 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 1,820 EMHB350 R/ 4(70) (KN0) 0.076) (0.38) (0.38) (4.6) - (1,200) (EMHB500 R/ 4(470) (KN0) 0.076) 0.38 (4.6) <td></td> | | |
| 35 560 KE0 0.060 0.30 0.30 3.7 - 1,320 EMHB350 R/ 680 KG5 0.056 0.28 0.28 3.4 - 1,470 EMHB350 R/ (910) (KN0) (0.044) (0.22) (0.18) (2.2) - (1,620) (EMHB350) R/ 1,000 LH0 0.047 0.24 0.24 2.9 - 1,820 EMHB350) R/ 1,300 MH0 0.045 0.23 0.23 2.8 - 2,000 EMHB350) R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHB300 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHB300 R/ 470 (KN0) 0.076) 0.38) (0.38) (4.6) - (1,200) EMHB500 R/ 4(470) (KN0) 0.087 0.44< | | |
| 35 680 KG5 0.056 0.28 0.28 3.4 1,470 EMHB350 R/ (910) (KN0) (0.044) (0.22) (0.18) (2.2) (1,620) (EMHB350 R/ 1,000 LH0 0.047 0.24 0.24 2.9 1,820 EMHB350 R/ 1,300 MH0 0.045 0.23 0.23 2.8 2,000 EMHB350 R/ 1,600 LN0 0.034 0.17 0.10 1.3 2,280 EMHB350 R/ 2,70 KE0 0.11 0.55 0.66 - 980 EMHB300 R/ 360 KG5 0.10 0.50 0.50 6.0 - 1,900 EMHB300 R/ (470) (KN0) (0.076) (0.38) (0.38) (4.6) - (1,200) (EMHB500 R/ 680 MH0 0.087 0.44 0.44 | | |
| (910) (KN0) (0.044) (0.22) (0.18) (2.2) - (1,620) (EMHB350 TF 1,000 LH0 0.047 0.24 0.24 2.9 - 1,820 EMHB350 R/ 1,800 MH0 0.045 0.23 0.23 2.8 - 2,000 EMHB350 R/ 1,600 LN0 0.034 0.17 0.10 1.3 - 2,280 EMHB350 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHB300 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 1,990 EMHB300 R/ 4(470) (KN0) (0.076) (0.38) (4.6) - 1,200 EMHB500 R/ 630 MH0 0.067 0.44 0.44 5.2 - 1,420 EMHB500 R/ 630 MH0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 1,100 MN0 | | |
| 1,000 LH0 0.047 0.24 0.24 2.9 - 1,820 EMHB350 R/ 1,300 MH0 0.045 0.23 0.23 2.8 - 2,000 EMHB350 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHB350 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHB350 R/ 360 KG5 0.10 0.55 6.6 - 980 EMHB500 R/ 4(470) (KN0) 0.076) (0.38) (0.44) 5.2 - 1,320 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 1,100 MN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 400 KE0 0.22 1.54 0.88 14 - | | |
| 1,300 MH0 0.045 0.23 0.23 2.8 - 2,000 EMHB350 R/ 1,600 LN0 0.034 0.17 0.10 1.3 - 2,280 EMHB350 R/ 2,200 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHB300 R/ 270 KE0 0.11 0.55 0.55 6.6 - 980 EMHB500 R/ 360 KG5 0.10 0.50 6.0 - 1,090 EMHB500 R/ (470) (KN0) (0.076) (0.38) (0.38) (4.6) - (1,200) (EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 820 LN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 1,100 MN0 0.050 0.225 0.25 3.0 - <td>,</td> | , | |
| 1,600 LN0 0.034 0.17 0.10 1.3 2,280 EMHB300 R/ 2,200 MN0 0.032 0.16 0.090 0.60 2,490 EMHB300 R/ 2,200 MN0 0.032 0.16 0.090 0.60 2,490 EMHB300 R/ 360 KG5 0.10 0.50 0.50 6.0 - 1,090 EMHB500 R/ 4(470) (KN0) (0.076) (0.38) (4.6) - 1,320 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 1100 MN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 400 KE0 0.22 1.54 0.88 14 - <td></td> | | |
| 2,200 MN0 0.032 0.16 0.090 0.60 - 2,490 EMHB350 R/ 360 KG5 0.11 0.55 0.55 6.6 - 980 EMHB500 R/ 360 KG5 0.10 0.50 0.50 6.0 - 1,090 EMHB500 R/ (470) (KN0) (0.076) (0.38) (0.38) (4.6) - (1,200) (EMHB500 R/ 510 LH0 0.087 0.44 0.44 5.2 - 1,320 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 820 LN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 1,100 MN0 0.050 0.22 1.54 0.88 14 - 540 EMHB630 R/ 270 KG5 0.17 1.19 0.68 | | |
| 270 KE0 0.11 0.55 0.55 6.6 - 980 EMHB500 R/ 360 KG5 0.10 0.50 0.50 6.0 - 1,090 EMHB500 R/ (470) (KN0) (0.076) (0.38) (0.38) (4.6) - (1,200) (EMHB500 R/ 50 EH0 0.087 0.44 0.44 5.2 - 1,320 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 820 LN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 1,100 MN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 200 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 330 (KN0) (0.13) (0.94) (0.53) (8.5) | | |
| 360 KG5 0.10 0.50 0.50 6.0 - 1,090 EMHB500 R/ 50 (470) (KN0) (0.076) (0.38) (0.38) (4.6) - (1,200) (EMHB500 TF 510 LH0 0.087 0.44 0.44 5.2 - 1,320 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 820 LN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 1,100 MN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 200 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 230 (KN0) (0.13) (0.94) (0.53) (8.5) - (630) (EMHB630 R/ 430 LH0 0.15 1.05 0.60 <td></td> | | |
| (470) (KN0) (0.076) (0.38) (0.38) (4.6) - (1,200) (EMHB500 TF 510 LH0 0.087 0.44 0.44 5.2 - 1,320 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 820 LN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 1,100 MN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 200 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 270 KG5 0.17 1.19 0.68 11 - 650 EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 | | |
| 50 510 LH0 0.087 0.44 0.44 5.2 - 1,320 EMHB500 R/ 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 820 LN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 1,100 MN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 1,100 MN0 0.050 0.22 1.54 0.88 14 - 540 EMHB630 R/ 270 KG5 0.17 1.19 0.68 11 - 650 EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 | | |
| 680 MH0 0.087 0.44 0.44 5.2 - 1,420 EMHB500 R/ 820 LN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 1,100 MN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 200 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 270 KG5 0.17 1.19 0.68 11 - 650 EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 R/ (330) (KN0) 0.15 1.05 0.60 9.6 - 780 EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - | , , , | |
| 820 LN0 0.050 0.25 0.25 3.0 - 2,040 EMHB500 R/ 1,100 MN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 200 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 270 KG5 0.17 1.19 0.68 11 - 650 EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - <td></td> | | |
| 1,100 MN0 0.050 0.25 0.25 3.0 - 2,240 EMHB500 R/ 200 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 270 KG5 0.17 1.19 0.68 11 - 650 EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 | | |
| 200 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 270 KG5 0.17 1.19 0.68 11 - 650 EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 R/ 470 MH0 0.15 1.05 0.60 9.6 - 780 EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - 540 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) | | |
| 63 270 KG5 0.17 1.19 0.68 11 - 650 EMHB630 R/ (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 TF 360 LH0 0.15 1.05 0.60 9.6 - 780 EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - 540 EMHB800 R/ 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8. | | |
| (330) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB630 TF 360 LH0 0.15 1.05 0.60 9.6 - 780 EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - 540 EMHB630 R/ 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 TF 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 TF 330 MH0 0.1 | | |
| 63 360 LH0 0.15 1.05 0.60 9.6 - 780 EMHB630 R/ 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - 540 EMHB800 R/ 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 R/ 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 R/ 390 LN0 0.085 0.58 0.19 3.0 | | |
| 470 MH0 0.12 0.84 0.48 7.7 - 940 EMHB630 R/ 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - 540 EMHB800 R/ 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 R/ 240 LH0 0.15 1.05 0.60 9.6 - 780 EMHB800 R/ 330 MH0 0.12 0.84 0.48 7.7 - 940 EMH8800 R/ 390 LN0 0.085 0.58 0.19 3.0 - | , | |
| 560 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB630 R/ 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - 540 EMHB800 R/ 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 R/ 240 LH0 0.15 1.05 0.60 9.6 - 780 EMHB800 R/ 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 R/ 390 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB800 R/ | | |
| 750 MN0 0.070 0.49 0.19 3.0 - 1,910 EMHB630 R/ 130 KE0 0.22 1.54 0.88 14 - 540 EMHB800 R/ 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 TF 240 LH0 0.15 1.05 0.60 9.6 - 780 EMHB800 R/ 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 R/ 390 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB800 R/ | | |
| 130 KE0 0.22 1.54 0.88 14 - 540 EMHB800 R/ 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 TF 240 LH0 0.15 1.05 0.60 9.6 - 780 EMHB800 R/ 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 R/ 390 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB800 R/ | | |
| 160 KG5 0.17 1.19 0.68 11 - 650 EMHB800 □ R/ (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 □ TF 240 LH0 0.15 1.05 0.60 9.6 - 780 EMHB800 □ R/ 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 □ R/ 390 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB800 □ R/ | | |
| (220) (KN0) (0.13) (0.94) (0.53) (8.5) - (830) (EMHB800 TF 240 LH0 0.15 1.05 0.60 9.6 - 780 EMHB800 RA 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 RA 390 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB800 RA | | |
| 80 240 LH0 0.15 1.05 0.60 9.6 - 780 EMHB800 □ R/ 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 □ R/ 390 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB800 □ R/ | | |
| 330 MH0 0.12 0.84 0.48 7.7 - 940 EMHB800 □ R/ EMHB800 □ R/ 390 LN0 0.085 0.58 0.19 3.0 - 1,790 EMHB800 □ R/ | , , | |
| 390 LN0 0.085 0.58 0.19 3.0 − 1,790 EMHB800 □ RA | | |
| | | |
| | | |
| 75 KE0 0.28 2.24 1.1 22 − 480 EMHB101 □ R/ | | |
| 100 KG5 0.21 1.68 0.84 17 - 580 EMHB101 □ R | | |
| (130) (KN0) (0.17) (1.32) (0.66) (13) – (740) (EMHB101□TF | | |
| 100 130 LH0 0.18 1.44 0.72 14 − 720 EMHB101□R | | |
| 180 MH0 0.15 1.20 0.60 12 - 840 EMHB101 □ R/ | | |
| 220 LN0 0.11 0.88 0.25 3.9 − 1,580 EMHB101 □ R/ | | |
| 300 MN0 0.091 0.73 0.22 3.9 − 1,690 EMHB101 □ R/ | | |

: Enter the appropriate terminal code.() :Second standard

♦RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

| Size code | Capacitance(µF) Frequency(Hz) | 120 | 1k | 10k | 100k | | |
|------------|-------------------------------|------|------|------|------|--|--|
| HA0 to JA0 | 47 to 470 | 0.93 | 0.97 | 1.00 | 1.00 | | |
| KE0 to MN0 | 75 to 200 | 0.40 | 0.75 | 0.90 | 1.00 | | |
| | 220 to 560 | 0.50 | 0.85 | 0.94 | 1.00 | | |
| | 680 to 1,600 | 0.60 | 0.87 | 0.95 | 1.00 | | |
| | 2,200 to 3,300 | 0.75 | 0.90 | 0.95 | 1.00 | | |

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note. Product specifications in this catalog are subject to change without notice. Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

CHEMI-CON ALUMINUM ELECTROLYTIC CAPACITORS

- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.

Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.

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In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

Product specifications in this catalog are subject to change without notice. Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

Part Numbering System Part Numbering System (Appendix) Standardization Available Items by Manufacturing Locations Environmental Measures Technical Note Precautions and Guidelines Recommended Soldering Conditions Taping, Lead-preforming and Packaging Available Terminals for Snap-in and Screw Mount Type