# HITANO ENTERPRISE CORP.

7F-7, No. 3, Wu Chuan 1st Road, New Taipei
Industrial Park, New Taipei City, TAIWAN, R.O.C.
Tel: +886 2 2299 1331 Fax: +886 2 2298 2466


## *Data Sheet*

Customer :

Product : Double sided metallized polypropylene film capacitor, HPMD

Size :

Approval No : CC81825040106

Issued Date : 2025-07-01

Edition : 2.0

## *Record of change*

| Date | Ver. | Description | Page |
|---|---|---|---|
| 2023-06-12 | 1.0 | | |
| 2025-07-01 | 2.0 | New | |
| | | | |
| | | | |
| | | | |

**VENDOR**：

☐ **HITANO ENTERPRISE CORP.**

7F-7,NO.3,WUCHUAN1ST ROAD,
NEW TAIPEI INDUSTRIAL PARK,
NEW TAIPEI CITY, TAIWAN, R.O.C.
TEL:+886222991331(REP.)
FAX:+886222982466

**MAKER**：

☐ **CHIEFCON ELECTRONICS CO.,LTD.**

NO.23,HER-CHENG RD,BA-DE
DISTRIC CITY TAO YUAN CITY, 334 TAIWAN.R.O.C
Tel: +886-3-3623092&3641144
Fax: +886-3-3623273

## PART NUMBER SYSTEM

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|
| Type | Class | Capacitance Code (pF) | Tolerance | Rated Voltage(VDC) | Lead Configuration | Lead Space | Vice Lead(P1) | Lead Length | Accessories Yards |
| HPMD | B=BOX | First two digits =significant figures. Third digit =Number of zeros. | J=5% K=10% | 2J=630 3A=1000 3C=1600 3D=2000 | L=Lead (2 PIN) | 9=7.5 A=10 E=15 H=22.5 K=27.5 Q=37.5 | X=NA | L=15.0 | The last is Internal identification code |

## PRODUCT DIMENSIONS

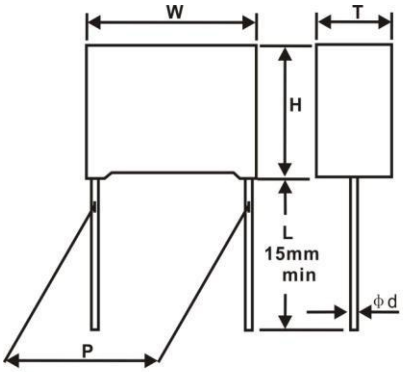



Fig. 1

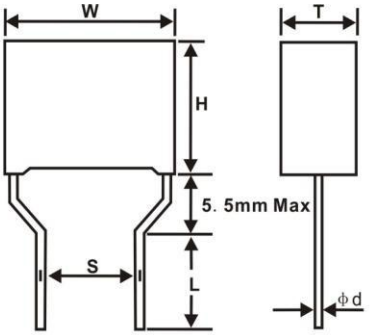



Fig. 2

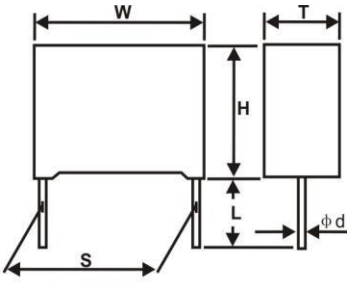



Fig. 3

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB332J2JLAXLX | 0.0033 | 332 | 5 | 630 | 400 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 13.2 | 0.8 | 1 | Gray |
| HPMDB392J2JLAXLX | 0.0039 | 392 | 5 | 630 | 400 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 15.6 | 1.0 | 1 | Gray |
| HPMDB472J2JLAXLX | 0.0047 | 472 | 5 | 630 | 400 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 18.8 | 1.2 | 1 | Gray |
| HPMDB562J2JLAXLX | 0.0056 | 562 | 5 | 630 | 400 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 22.4 | 1.4 | 1 | Gray |
| HPMDB682J2JLAXLX | 0.0068 | 682 | 5 | 630 | 400 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 27.2 | 1.6 | 1 | Gray |
| HPMDB822J2JLAXLX | 0.0082 | 822 | 5 | 630 | 400 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 32.8 | 1.8 | 1 | Gray |
| HPMDB103J2JLAXLX | 0.01 | 103 | 5 | 630 | 400 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 40 | 2.1 | 1 | Gray |
| HPMDB123J2JLAXLX | 0.012 | 123 | 5 | 630 | 400 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 48 | 2.3 | 1 | Gray |
| HPMDB153J2JLAXLX | 0.015 | 153 | 5 | 630 | 400 | 13.0 | 12.0 | 6.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 60 | 2.7 | 1 | Gray |
| HPMDB183J2JLAXLX | 0.018 | 183 | 5 | 630 | 400 | 13.0 | 12.0 | 6.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 72 | 3.0 | 1 | Gray |
| HPMDB223J2JLAXL2 | 0.022 | 223 | 5 | 630 | 400 | 13.0 | 12.0 | 6.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 88 | 3.3 | 1 | Gray |
| HPMDB273J2JLAXLX | 0.027 | 273 | 5 | 630 | 400 | 13.0 | 12.0 | 6.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 108 | 3.6 | 1 | Gray |
| HPMDB333J2JLAXLX | 0.033 | 333 | 5 | 630 | 400 | 13.0 | 16.0 | 8.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 132 | 4.8 | 1 | Gray |
| HPMDB473J2JLAXLX | 0.047 | 473 | 5 | 630 | 400 | 13.0 | 16.0 | 8.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 188 | 5.7 | 1 | Gray |
| HPMDB563J2JLAXLX | 0.056 | 563 | 5 | 630 | 400 | 13.0 | 16.0 | 8.0 | 10.0 | NA | 0.6 | 15.0 | 4000 | 224 | 6.3 | 1 | Gray |
| HPMDB103J2JLEXLX | 0.01 | 103 | 5 | 630 | 400 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 30 | 2.2 | 1 | Gray |
| HPMDB123J2JLEXLX | 0.012 | 123 | 5 | 630 | 400 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 3000 | 36 | 2.5 | 1 | Gray |
| HPMDB153J2JLEXLX | 0.015 | 153 | 5 | 630 | 400 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 3000 | 45 | 2.8 | 1 | Gray |

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB183J2JLEXLX | 0.018 | 183 | 5 | 630 | 400 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 3000 | 54 | 3.1 | 1 | Gray |
| HPMDB223J2JLEXLX | 0.022 | 223 | 5 | 630 | 400 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 66 | 3.4 | 1 | Gray |
| HPMDB273J2JLEXLX | 0.027 | 273 | 5 | 630 | 400 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 81 | 3.8 | 1 | Gray |
| HPMDB333J2JLEXLX | 0.033 | 333 | 5 | 630 | 400 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 99 | 4.3 | 1 | Gray |
| HPMDB393J2JLEXLX | 0.039 | 393 | 5 | 630 | 400 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 117 | 4.7 | 1 | Gray |
| HPMDB473J2JLEXLY | 0.047 | 473 | 5 | 630 | 400 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 141 | 5.1 | 1 | Gray |
| HPMDB563J2JLEXL1 | 0.056 | 563 | 5 | 630 | 400 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 3000 | 168 | 4.5 | 1 | Gray |
| HPMDB683J2JLEXLX | 0.068 | 683 | 5 | 630 | 400 | 18.0 | 14.5 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 3000 | 204 | 5.1 | 1 | Gray |
| HPMDB823J2JLEXLX | 0.082 | 823 | 5 | 630 | 400 | 18.0 | 14.5 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 3000 | 246 | 5.6 | 1 | Gray |
| HPMDB104J2JLEXLX | 0.1 | 104 | 5 | 630 | 400 | 18.0 | 16.0 | 10.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 300 | 6.4 | 1 | Gray |
| HPMDB124J2JLEXL1 | 0.12 | 124 | 5 | 630 | 400 | 18.0 | 18.0 | 10.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 360 | 6.1 | 1 | Gray |
| HPMDB154J2JLEXLX | 0.15 | 154 | 5 | 630 | 400 | 18.0 | 18.5 | 11.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 450 | 6.9 | 1 | Gray |
| HPMDB184J2JLEXLX | 0.18 | 184 | 5 | 630 | 400 | 18.0 | 21.0 | 12.0 | 15.0 | NA | 0.8 | 15.0 | 3000 | 540 | 8.1 | 1 | Gray |
| HPMDB473J2JLHXLX | 0.047 | 473 | 5 | 630 | 400 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 70.5 | 5.8 | 1 | Gray |
| HPMDB563J2JLHXLX | 0.056 | 563 | 5 | 630 | 400 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 84 | 4.8 | 1 | Gray |
| HPMDB683J2JLHXLY | 0.068 | 683 | 5 | 630 | 400 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 102 | 5.3 | 1 | Gray |
| HPMDB823J2JLHXLX | 0.082 | 823 | 5 | 630 | 400 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 123 | 5.8 | 1 | Gray |
| HPMDB104J2JLHXLY | 0.1 | 104 | 5 | 630 | 400 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 150 | 6.4 | 1 | Gray |
| HPMDB124J2JLHXLX | 0.12 | 124 | 5 | 630 | 400 | 26.5 | 16.5 | 7.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 180 | 4.9 | 1 | Gray |
| HPMDB154J2JLHXLX | 0.15 | 154 | 5 | 630 | 400 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 1500 | 225 | 5.7 | 1 | Gray |
| HPMDB184J2JLHXLY | 0.18 | 184 | 5 | 630 | 400 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 1500 | 270 | 6.3 | 1 | Gray |
| HPMDB224J2JLHXLX | 0.22 | 224 | 5 | 630 | 400 | 26.5 | 19.0 | 10.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 330 | 7.2 | 1 | Gray |
| HPMDB274J2JLHXLX | 0.27 | 274 | 5 | 630 | 400 | 26.5 | 19.0 | 10.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 405 | 7.9 | 1 | Gray |
| HPMDB334J2JLHXLX | 0.33 | 334 | 5 | 630 | 400 | 26.0 | 20.0 | 11.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 495 | 9.0 | 1 | Gray |
| HPMDB394J2JLHXLX | 0.39 | 394 | 5 | 630 | 400 | 26.0 | 21.5 | 12.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 585 | 8.8 | 1 | Gray |
| HPMDB474J2JLHXLX | 0.47 | 474 | 5 | 630 | 400 | 26.5 | 23.0 | 13.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 705 | 9.7 | 1 | Gray |
| HPMDB564J2JLHXLX | 0.56 | 564 | 5 | 630 | 400 | 26.0 | 25.0 | 15.0 | 22.5 | NA | 0.8 | 15.0 | 1500 | 840 | 11.4 | 1 | Gray |
| HPMDB154J2JLKXLX | 0.15 | 154 | 5 | 630 | 400 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 135 | 6.0 | 1 | Gray |
| HPMDB184J2JLKXLX | 0.18 | 184 | 5 | 630 | 400 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 162 | 6.6 | 1 | Gray |
| HPMDB224J2JLKXLY | 0.22 | 224 | 5 | 630 | 400 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 198 | 7.3 | 1 | Gray |
| HPMDB274J2JLKXLY | 0.27 | 274 | 5 | 630 | 400 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 243 | 8.0 | 1 | Gray |
| HPMDB334J2JLKXLY | 0.33 | 334 | 5 | 630 | 400 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 297 | 9.4 | 1 | Gray |
| HPMDB394J2JLKXLY | 0.39 | 394 | 5 | 630 | 400 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 351 | 8.8 | 1 | Gray |
| HPMDB474J2JLKXLY | 0.47 | 474 | 5 | 630 | 400 | 31.5 | 21.6 | 13.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 423 | 10.1 | 1 | Gray |
| HPMDB564J2JLKXL1 | 0.56 | 564 | 5 | 630 | 400 | 31.5 | 21.6 | 13.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 504 | 11.0 | 1 | Gray |
| HPMDB684J2JLKXLX | 0.68 | 684 | 5 | 630 | 400 | 31.0 | 25.0 | 14.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 612 | 10.1 | 1 | Gray |

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB824J2JLKXLX | 0.82 | 824 | 5 | 630 | 400 | 32.0 | 28.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 738 | 11.5 | 1 | Gray |
| HPMDB105J2JLKXL2 | 1.0 | 105 | 5 | 630 | 400 | 31.0 | 33.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 900 | 12.5 | 1 | Gray |
| HPMDB125J2JLKXLX | 1.2 | 125 | 5 | 630 | 400 | 31.0 | 33.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 1080 | 12.8 | 1 | Gray |
| HPMDB155J2JLKXL1 | 1.5 | 155 | 5 | 630 | 400 | 32.0 | 37.0 | 22.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 1350 | 15.1 | 1 | Gray |
| HPMDB185J2JLKXLX | 1.8 | 185 | 5 | 630 | 400 | 32.0 | 37.0 | 22.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 1620 | 13.5 | 1 | Gray |
| HPMDB471J3AL9XL1 | 0.00047 | 471 | 5 | 1000 | 400 | 10.0 | 9.0 | 4.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 2.82 | 0.1 | 1 | Gray |
| HPMDB561J3AL9XLX | 0.00056 | 561 | 5 | 1000 | 400 | 10.0 | 9.0 | 4.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 3.36 | 0.1 | 1 | Gray |
| HPMDB681J3AL9XLX | 0.00068 | 681 | 5 | 1000 | 400 | 10.0 | 9.0 | 4.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 4.08 | 0.2 | 1 | Gray |
| HPMDB821J3AL9XLX | 0.00082 | 821 | 5 | 1000 | 400 | 10.0 | 9.0 | 4.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 4.92 | 0.2 | 1 | Gray |
| HPMDB102J3AL9XL1 | 0.001 | 102 | 5 | 1000 | 400 | 10.0 | 9.0 | 4.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 6 | 0.3 | 1 | Gray |
| HPMDB122J3AL9XLX | 0.0012 | 122 | 5 | 1000 | 400 | 10.0 | 9.0 | 4.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 7.2 | 0.3 | 1 | Gray |
| HPMDB152J3AL9XLX | 0.0015 | 152 | 5 | 1000 | 400 | 10.0 | 11.0 | 5.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 9 | 0.4 | 1 | Gray |
| HPMDB182J3AL9XLX | 0.0018 | 182 | 5 | 1000 | 400 | 10.0 | 11.0 | 5.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 10.8 | 0.5 | 1 | Gray |
| HPMDB222J3AL9XLX | 0.0022 | 222 | 5 | 1000 | 400 | 10.0 | 11.0 | 5.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 13.2 | 0.6 | 1 | Gray |
| HPMDB272J3AL9XLX | 0.0027 | 272 | 5 | 1000 | 400 | 10.0 | 12.0 | 6.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 16.2 | 0.7 | 1 | Gray |
| HPMDB332J3AL9XLX | 0.0033 | 332 | 5 | 1000 | 400 | 10.0 | 12.0 | 6.0 | 7.5 | NA | 0.6 | 15.0 | 6000 | 19.8 | 0.8 | 1 | Gray |
| HPMDB471J3ALAXLX | 0.00047 | 471 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 3.055 | 0.2 | 1 | Gray |
| HPMDB561J3ALAXLX | 0.00056 | 561 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 3.64 | 0.2 | 1 | Gray |
| HPMDB681J3ALAXLX | 0.00068 | 681 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 4.42 | 0.3 | 1 | Gray |
| HPMDB821J3ALAXLX | 0.00082 | 821 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 5.33 | 0.3 | 1 | Gray |
| HPMDB102J3ALAXLX | 0.001 | 102 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 6.5 | 0.4 | 1 | Gray |
| HPMDB122J3ALAXLX | 0.0012 | 122 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 7.8 | 0.5 | 1 | Gray |
| HPMDB152J3ALAXLX | 0.0015 | 152 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 9.75 | 0.6 | 1 | Gray |
| HPMDB182J3ALAXLX | 0.0018 | 182 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 11.7 | 0.7 | 1 | Gray |
| HPMDB222J3ALAXLX | 0.0022 | 222 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 14.3 | 0.8 | 1 | Gray |
| HPMDB272J3ALAXLX | 0.0027 | 272 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 17.55 | 1.0 | 1 | Gray |
| HPMDB332J3ALAXLY | 0.0033 | 332 | 5 | 1000 | 600 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 21.45 | 1.1 | 1 | Gray |
| HPMDB392J3ALAXLX | 0.0039 | 392 | 5 | 1000 | 600 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 25.35 | 1.3 | 1 | Gray |
| HPMDB472J3ALAXLY | 0.0047 | 472 | 5 | 1000 | 600 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 30.55 | 1.5 | 1 | Gray |
| HPMDB562J3ALAXLX | 0.0056 | 562 | 5 | 1000 | 600 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 36.4 | 1.7 | 1 | Gray |
| HPMDB682J3ALAXLX | 0.0068 | 682 | 5 | 1000 | 600 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 44.2 | 1.8 | 1 | Gray |
| HPMDB822J3ALAXLX | 0.0082 | 822 | 5 | 1000 | 600 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 53.3 | 1.9 | 1 | Gray |
| HPMDB103J3ALAXLX | 0.01 | 103 | 5 | 1000 | 600 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 65 | 2.1 | 1 | Gray |
| HPMDB123J3ALAXLY | 0.012 | 123 | 5 | 1000 | 600 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 78 | 2.3 | 1 | Gray |
| HPMDB153J3ALAXLX | 0.015 | 153 | 5 | 1000 | 600 | 13.0 | 12.0 | 6.0 | 10.0 | NA | 0.6 | 15.0 | 6500 | 97.5 | 2.7 | 1 | Gray |
| HPMDB822J3ALEXLX | 0.0082 | 822 | 5 | 1000 | 600 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 3500 | 28.7 | 2.1 | 1 | Gray |

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB103J3ALEXLS | 0.01 | 103 | 5 | 1000 | 600 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 35 | 2.3 | 1 | Gray |
| HPMDB123J3ALEXLS | 0.012 | 123 | 5 | 1000 | 600 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 42 | 2.5 | 1 | Gray |
| HPMDB153J3ALEXLS | 0.015 | 153 | 5 | 1000 | 600 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 52.5 | 2.8 | 1 | Gray |
| HPMDB183J3ALEXLS | 0.018 | 183 | 5 | 1000 | 600 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 63 | 3.1 | 1 | Gray |
| HPMDB223J3ALEXLS | 0.022 | 223 | 5 | 1000 | 600 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 77 | 3.5 | 1 | Gray |
| HPMDB273J3ALEXLS | 0.027 | 273 | 5 | 1000 | 600 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 94.5 | 3.9 | 1 | Gray |
| HPMDB333J3ALEXLS | 0.033 | 333 | 5 | 1000 | 600 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 115.5 | 4.3 | 1 | Gray |
| HPMDB393J3ALEXLS | 0.039 | 393 | 5 | 1000 | 600 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 3500 | 136.5 | 4.9 | 1 | Gray |
| HPMDB473J3ALEXLS | 0.047 | 473 | 5 | 1000 | 600 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 3500 | 164.5 | 5.4 | 1 | Gray |
| HPMDB563J3ALEXLS | 0.056 | 563 | 5 | 1000 | 600 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 3500 | 196 | 4.6 | 1 | Gray |
| HPMDB683J3ALEXLS | 0.068 | 683 | 5 | 1000 | 600 | 18.0 | 14.5 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 3500 | 238 | 5.1 | 1 | Gray |
| HPMDB823J3ALEXLS | 0.082 | 823 | 5 | 1000 | 600 | 18.0 | 14.5 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 3500 | 287 | 5.8 | 1 | Gray |
| HPMDB104J3ALEXLS | 0.1 | 104 | 5 | 1000 | 600 | 18.0 | 16.0 | 10.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 350 | 6.7 | 1 | Gray |
| HPMDB124J3ALEXL1 | 0.12 | 124 | 5 | 1000 | 600 | 18.0 | 18.0 | 10.0 | 15.0 | NA | 0.8 | 15.0 | 3500 | 420 | 6.1 | 1 | Gray |
| HPMDB273J3ALHXL1 | 0.027 | 273 | 5 | 1000 | 600 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 56.7 | 4.4 | 1 | Gray |
| HPMDB333J3ALHXLX | 0.033 | 333 | 5 | 1000 | 600 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 69.3 | 4.9 | 1 | Gray |
| HPMDB393J3ALHXL1 | 0.039 | 393 | 5 | 1000 | 600 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 81.9 | 5.3 | 1 | Gray |
| HPMDB473J3ALHXL1 | 0.047 | 473 | 5 | 1000 | 600 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 98.7 | 5.8 | 1 | Gray |
| HPMDB563J3ALHXLX | 0.056 | 563 | 5 | 1000 | 600 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 117.6 | 4.8 | 1 | Gray |
| HPMDB683J3ALHXL1 | 0.068 | 683 | 5 | 1000 | 600 | 26.5 | 16.5 | 7.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 142.8 | 5.5 | 1 | Gray |
| HPMDB823J3ALHXLX | 0.082 | 823 | 5 | 1000 | 600 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 2100 | 172.2 | 6.0 | 1 | Gray |
| HPMDB104J3ALHXLX | 0.1 | 104 | 5 | 1000 | 600 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 2100 | 210 | 6.8 | 1 | Gray |
| HPMDB124J3ALHXL1 | 0.12 | 124 | 5 | 1000 | 600 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 2100 | 252 | 5.1 | 1 | Gray |
| HPMDB154J3ALHXLX | 0.15 | 154 | 5 | 1000 | 600 | 26.5 | 19.0 | 10.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 315 | 5.9 | 1 | Gray |
| HPMDB184J3ALHXL1 | 0.18 | 184 | 5 | 1000 | 600 | 26.0 | 20.0 | 11.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 378 | 6.7 | 1 | Gray |
| HPMDB224J3ALHXL1 | 0.22 | 224 | 5 | 1000 | 600 | 26.0 | 20.0 | 11.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 462 | 7.4 | 1 | Gray |
| HPMDB274J3ALHXLX | 0.27 | 274 | 5 | 1000 | 600 | 26.5 | 23.0 | 13.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 567 | 8.5 | 1 | Gray |
| HPMDB334J3ALHXLX | 0.33 | 334 | 5 | 1000 | 600 | 26.0 | 25.0 | 15.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 693 | 9.4 | 1 | Gray |
| HPMDB394J3ALHXLX | 0.39 | 394 | 5 | 1000 | 600 | 26.0 | 25.0 | 15.0 | 22.5 | NA | 0.8 | 15.0 | 2100 | 819 | 9.5 | 1 | Gray |
| HPMDB104J3ALKXLX | 0.1 | 104 | 5 | 1000 | 600 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 100 | 7.2 | 1 | Gray |
| HPMDB124J3ALKXLX | 0.12 | 124 | 5 | 1000 | 600 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 120 | 5.4 | 1 | Gray |
| HPMDB154J3ALKXLX | 0.15 | 154 | 5 | 1000 | 600 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 150 | 6.3 | 1 | Gray |
| HPMDB184J3ALKXLX | 0.18 | 184 | 5 | 1000 | 600 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 180 | 7.2 | 1 | Gray |
| HPMDB224J3ALKXL1 | 0.22 | 224 | 5 | 1000 | 600 | 31.5 | 21.6 | 13.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 220 | 8.0 | 1 | Gray |
| HPMDB274J3ALKXLX | 0.27 | 274 | 5 | 1000 | 600 | 31.5 | 21.6 | 13.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 270 | 9.0 | 1 | Gray |
| HPMDB334J3ALKXLX | 0.33 | 334 | 5 | 1000 | 600 | 31.0 | 25.0 | 14.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 330 | 10.3 | 1 | Gray |

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB334J3ALKXL1 | 0.33 | 334 | 5 | 1000 | 600 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 900 | 297 | 9.4 | 1 | Gray |
| HPMDB394J3ALKXLX | 0.39 | 394 | 5 | 1000 | 600 | 32.0 | 28.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 390 | 10.3 | 1 | Gray |
| HPMDB474J3ALKXLX | 0.47 | 474 | 5 | 1000 | 600 | 32.0 | 28.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 470 | 11.3 | 1 | Gray |
| HPMDB564J3ALKXLX | 0.56 | 564 | 5 | 1000 | 600 | 32.0 | 37.0 | 22.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 560 | 13.0 | 1 | Gray |
| HPMDB684J3ALKXL1 | 0.68 | 684 | 5 | 1000 | 600 | 32.0 | 37.0 | 22.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 680 | 11.7 | 1 | Gray |
| HPMDB684J3ALKXLX | 0.68 | 684 | 5 | 1000 | 600 | 32.0 | 28.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 1000 | 680 | 9.6 | 1 | Gray |
| HPMDB185J3ALQXLX | 1.8 | 185 | 5 | 1000 | 600 | 41.5 | 45.0 | 30.0 | 37.5 | NA | 1.0 | 15.0 | 500 | 900 | 15.3 | 1 | Gray |
| HPMDB225J3ALQXLX | 2.2 | 225 | 5 | 1000 | 600 | 41.5 | 45.0 | 30.0 | 37.5 | NA | 1.0 | 15.0 | 500 | 1100 | 17.0 | 1 | Gray |
| HPMDB222J3CLAXLX | 0.0022 | 222 | 5 | 1600 | 650 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 8000 | 17.6 | 0.9 | 1 | Gray |
| HPMDB332J3CLAXLX | 0.0033 | 332 | 5 | 1600 | 650 | 13.0 | 9.0 | 4.0 | 10.0 | NA | 0.6 | 15.0 | 8000 | 26.4 | 1.2 | 1 | Gray |
| HPMDB392J3CLAXL1 | 0.0039 | 392 | 5 | 1600 | 650 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 8000 | 31.2 | 1.3 | 1 | Gray |
| HPMDB472J3CLAXLX | 0.0047 | 472 | 5 | 1600 | 650 | 13.0 | 11.0 | 5.0 | 10.0 | NA | 0.6 | 15.0 | 8000 | 37.6 | 1.5 | 1 | Gray |
| HPMDB562J3CLAXLX | 0.0056 | 562 | 5 | 1600 | 650 | 13.0 | 12.0 | 6.0 | 10.0 | NA | 0.6 | 15.0 | 8000 | 44.8 | 1.7 | 1 | Gray |
| HPMDB682J3CLAXLX | 0.0068 | 682 | 5 | 1600 | 650 | 13.0 | 12.0 | 6.0 | 10.0 | NA | 0.6 | 15.0 | 8000 | 54.4 | 1.8 | 1 | Gray |
| HPMDB332J3CLEXLX | 0.0033 | 332 | 5 | 1600 | 650 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 6000 | 19.8 | 1.3 | 1 | Gray |
| HPMDB392J3CLEXLX | 0.0039 | 392 | 5 | 1600 | 650 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 6000 | 23.4 | 1.4 | 1 | Gray |
| HPMDB472J3CLEXLX | 0.0047 | 472 | 5 | 1600 | 650 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 6000 | 28.2 | 1.6 | 1 | Gray |
| HPMDB562J3CLEXLX | 0.0056 | 562 | 5 | 1600 | 650 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 6000 | 33.6 | 1.7 | 1 | Gray |
| HPMDB682J3CLEXL1 | 0.0068 | 682 | 5 | 1600 | 650 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 6000 | 40.8 | 1.9 | 1 | Gray |
| HPMDB822J3CLEXL1 | 0.0082 | 822 | 5 | 1600 | 650 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 6000 | 49.2 | 2.1 | 1 | Gray |
| HPMDB103J3CLEXLY | 0.01 | 103 | 5 | 1600 | 650 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 6000 | 60 | 2.3 | 1 | Gray |
| HPMDB123J3CLEXLX | 0.012 | 123 | 5 | 1600 | 650 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 6000 | 72 | 2.6 | 1 | Gray |
| HPMDB153J3CLEXLX | 0.015 | 153 | 5 | 1600 | 650 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 6000 | 90 | 2.9 | 1 | Gray |
| HPMDB183J3CLEXLX | 0.018 | 183 | 5 | 1600 | 650 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 6000 | 108 | 3.3 | 1 | Gray |
| HPMDB223J3CLEXL1 | 0.022 | 223 | 5 | 1600 | 650 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 6000 | 132 | 3.7 | 1 | Gray |
| HPMDB273J3CLEXL1 | 0.027 | 273 | 5 | 1600 | 650 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 6000 | 162 | 4.2 | 1 | Gray |
| HPMDB333J3CLEXLX | 0.033 | 333 | 5 | 1600 | 650 | 18.0 | 14.5 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 6000 | 198 | 4.7 | 1 | Gray |
| HPMDB393J3CLEXLX | 0.039 | 393 | 5 | 1600 | 650 | 18.0 | 17.0 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 6000 | 234 | 5.3 | 1 | Gray |
| HPMDB473J3CLEXLX | 0.047 | 473 | 5 | 1600 | 650 | 18.0 | 17.0 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 6000 | 282 | 6.1 | 1 | Gray |
| HPMDB563J3CLEXLX | 0.056 | 563 | 5 | 1600 | 650 | 18.0 | 18.0 | 10.0 | 15.0 | NA | 0.8 | 15.0 | 6000 | 336 | 5.0 | 1 | Gray |
| HPMDB223J3CLHXL1 | 0.022 | 223 | 5 | 1600 | 650 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 66 | 4.0 | 1 | Gray |
| HPMDB273J3CLHXL1 | 0.027 | 273 | 5 | 1600 | 650 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 81 | 4.4 | 1 | Gray |
| HPMDB333J3CLHXL1 | 0.033 | 333 | 5 | 1600 | 650 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 99 | 4.9 | 1 | Gray |
| HPMDB393J3CLHXL1 | 0.039 | 393 | 5 | 1600 | 650 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 117 | 5.5 | 1 | Gray |
| HPMDB473J3CLHXL1 | 0.047 | 473 | 5 | 1600 | 650 | 26.5 | 16.5 | 7.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 141 | 6.0 | 1 | Gray |
| HPMDB563J3CLHXLX | 0.056 | 563 | 5 | 1600 | 650 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 3000 | 168 | 5.1 | 1 | Gray |

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB683J3CLHXLX | 0.068 | 683 | 5 | 1600 | 650 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 3000 | 204 | 5.8 | 1 | Gray |
| HPMDB823J3CLHXLX | 0.082 | 823 | 5 | 1600 | 650 | 26.0 | 15.8 | 10.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 246 | 6.8 | 1 | Gray |
| HPMDB104J3CLHXL1 | 0.1 | 104 | 5 | 1600 | 650 | 26.0 | 20.0 | 11.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 300 | 7.3 | 1 | Gray |
| HPMDB124J3CLHXLX | 0.12 | 124 | 5 | 1600 | 650 | 26.0 | 20.0 | 11.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 360 | 5.7 | 1 | Gray |
| HPMDB154J3CLHXLX | 0.15 | 154 | 5 | 1600 | 650 | 26.5 | 23.0 | 13.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 450 | 6.3 | 1 | Gray |
| HPMDB224J3CLHXLX | 0.22 | 224 | 5 | 1600 | 650 | 26.0 | 25.0 | 15.0 | 22.5 | NA | 0.8 | 15.0 | 3000 | 660 | 8.1 | 1 | Gray |
| HPMDB473J3CLKXL1 | 0.047 | 473 | 5 | 1600 | 650 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 94 | 5.8 | 1 | Gray |
| HPMDB563J3CLKXLX | 0.056 | 563 | 5 | 1600 | 650 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 112 | 5.4 | 1 | Gray |
| HPMDB683J3CLKXLX | 0.068 | 683 | 5 | 1600 | 650 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 136 | 5.9 | 1 | Gray |
| HPMDB823J3CLKXLX | 0.082 | 823 | 5 | 1600 | 650 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 164 | 6.9 | 1 | Gray |
| HPMDB104J3CLKXLX | 0.1 | 104 | 5 | 1600 | 650 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 200 | 7.6 | 1 | Gray |
| HPMDB124J3CLKXLX | 0.12 | 124 | 5 | 1600 | 650 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 240 | 5.7 | 1 | Gray |
| HPMDB154J3CLKXLX | 0.15 | 154 | 5 | 1600 | 650 | 31.5 | 21.6 | 13.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 300 | 6.6 | 1 | Gray |
| HPMDB184J3CLKXLX | 0.18 | 184 | 5 | 1600 | 650 | 31.0 | 25.0 | 14.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 360 | 7.4 | 1 | Gray |
| HPMDB224J3CLKXLX | 0.22 | 224 | 5 | 1600 | 650 | 31.0 | 25.0 | 14.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 440 | 8.4 | 1 | Gray |
| HPMDB274J3CLKXLX | 0.27 | 274 | 5 | 1600 | 650 | 32.0 | 28.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 540 | 9.9 | 1 | Gray |
| HPMDB334J3CLKXLY | 0.33 | 334 | 5 | 1600 | 650 | 31.0 | 33.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 2000 | 660 | 11.0 | 1 | Gray |
| HPMDB104J3CLQXLX | 0.1 | 104 | 5 | 1600 | 650 | 42.0 | 22.0 | 12.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 120 | 8.1 | 1 | Gray |
| HPMDB124J3CLQXLX | 0.12 | 124 | 5 | 1600 | 650 | 42.0 | 22.0 | 12.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 144 | 6.1 | 1 | Gray |
| HPMDB184J3CLQXLX | 0.18 | 184 | 5 | 1600 | 650 | 41.0 | 24.0 | 13.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 216 | 7.7 | 1 | Gray |
| HPMDB224J3CLQXLX | 0.22 | 224 | 5 | 1600 | 650 | 41.0 | 24.0 | 13.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 264 | 8.5 | 1 | Gray |
| HPMDB274J3CLQXLX | 0.27 | 274 | 5 | 1600 | 650 | 41.0 | 24.0 | 13.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 324 | 9.5 | 1 | Gray |
| HPMDB334J3CLQXLX | 0.33 | 334 | 5 | 1600 | 650 | 42.0 | 25.0 | 14.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 396 | 11.1 | 1 | Gray |
| HPMDB394J3CLQXLX | 0.39 | 394 | 5 | 1600 | 650 | 41.0 | 28.5 | 16.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 468 | 10.4 | 1 | Gray |
| HPMDB474J3CLQXLX | 0.47 | 474 | 5 | 1600 | 650 | 41.0 | 28.5 | 16.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 564 | 12.0 | 1 | Gray |
| HPMDB564J3CLQXLX | 0.56 | 564 | 5 | 1600 | 650 | 41.5 | 33.5 | 20.5 | 37.5 | NA | 1.0 | 15.0 | 1200 | 672 | 13.7 | 1 | Gray |
| HPMDB684J3CLQXLX | 0.68 | 684 | 5 | 1600 | 650 | 41.5 | 33.5 | 20.5 | 37.5 | NA | 1.0 | 15.0 | 1200 | 816 | 12.3 | 1 | Gray |
| HPMDB824J3CLQXLX | 0.82 | 824 | 5 | 1600 | 650 | 42.0 | 39.5 | 20.0 | 37.5 | NA | 1.0 | 15.0 | 1200 | 984 | 14.1 | 1 | Gray |
| HPMDB221J3DLEXLY | 0.00022 | 221 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 11000 | 2.42 | 0.1 | 1 | Gray |
| HPMDB271J3DLEXLX | 0.00027 | 271 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 11000 | 2.97 | 0.1 | 1 | Gray |
| HPMDB331J3DLEXL1 | 0.00033 | 331 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 11000 | 3.63 | 0.1 | 1 | Gray |
| HPMDB391J3DLEXLX | 0.00039 | 391 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 11000 | 4.29 | 0.2 | 1 | Gray |
| HPMDB471J3DLEXLX | 0.00047 | 471 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 4.465 | 0.2 | 1 | Gray |
| HPMDB561J3DLEXLX | 0.00056 | 561 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 5.32 | 0.2 | 1 | Gray |
| HPMDB681J3DLEXLX | 0.00068 | 681 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 6.46 | 0.3 | 1 | Gray |
| HPMDB821J3DLEXLX | 0.00082 | 821 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 7.79 | 0.4 | 1 | Gray |

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB102J3DLEXLX | 0.001 | 102 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 9.5 | 0.4 | 1 | Gray |
| HPMDB122J3DLEXLX | 0.0012 | 122 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 11.4 | 0.5 | 1 | Gray |
| HPMDB152J3DLEXLX | 0.0015 | 152 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 14.25 | 0.7 | 1 | Gray |
| HPMDB182J3DLEXLX | 0.0018 | 182 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 17.1 | 0.8 | 1 | Gray |
| HPMDB222J3DLEXL1 | 0.0022 | 222 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 20.9 | 1.0 | 1 | Gray |
| HPMDB272J3DLEXLX | 0.0027 | 272 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 25.65 | 1.2 | 1 | Gray |
| HPMDB332J3DLEXLX | 0.0033 | 332 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 31.35 | 1.3 | 1 | Gray |
| HPMDB392J3DLEXLX | 0.0039 | 392 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.6 | 15.0 | 9500 | 37.05 | 1.4 | 1 | Gray |
| HPMDB472J3DLEXLX | 0.0047 | 472 | 5 | 2000 | 700 | 18.0 | 11.0 | 5.0 | 15.0 | NA | 0.8 | 15.0 | 9500 | 44.65 | 1.6 | 1 | Gray |
| HPMDB562J3DLEXLX | 0.0056 | 562 | 5 | 2000 | 700 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 9500 | 53.2 | 1.8 | 1 | Gray |
| HPMDB682J3DLEXL1 | 0.0068 | 682 | 5 | 2000 | 700 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 9500 | 64.6 | 2.0 | 1 | Gray |
| HPMDB822J3DLEXLX | 0.0082 | 822 | 5 | 2000 | 700 | 18.0 | 12.0 | 6.0 | 15.0 | NA | 0.8 | 15.0 | 9500 | 77.9 | 2.1 | 1 | Gray |
| HPMDB103J3DLEXLX | 0.01 | 103 | 5 | 2000 | 700 | 18.0 | 13.5 | 7.5 | 15.0 | NA | 0.8 | 15.0 | 9500 | 95 | 2.5 | 1 | Gray |
| HPMDB153J3DLEXLX | 0.015 | 153 | 5 | 2000 | 700 | 18.0 | 14.5 | 8.5 | 15.0 | NA | 0.8 | 15.0 | 9500 | 142.5 | 3.1 | 1 | Gray |
| HPMDB183J3DLEXLX | 0.018 | 183 | 5 | 2000 | 700 | 18.0 | 16.0 | 10.0 | 15.0 | NA | 0.8 | 15.0 | 9500 | 171 | 3.6 | 1 | Gray |
| HPMDB223J3DLEXLX | 0.022 | 223 | 5 | 2000 | 700 | 18.0 | 18.0 | 10.0 | 15.0 | NA | 0.8 | 15.0 | 9500 | 209 | 4.0 | 1 | Gray |
| HPMDB273J3DLEXLX | 0.027 | 273 | 5 | 2000 | 700 | 18.0 | 19.0 | 11.0 | 15.0 | NA | 0.8 | 15.0 | 9500 | 256.5 | 4.6 | 1 | Gray |
| HPMDB102J3DLHXLX | 0.001 | 102 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 4.5 | 0.4 | 1 | Gray |
| HPMDB122J3DLHXLX | 0.0012 | 122 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 5.4 | 0.5 | 1 | Gray |
| HPMDB152J3DLHXLX | 0.0015 | 152 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 6.75 | 0.7 | 1 | Gray |
| HPMDB182J3DLHXLX | 0.0018 | 182 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 8.1 | 0.8 | 1 | Gray |
| HPMDB222J3DLHXLX | 0.0022 | 222 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 9.9 | 1.0 | 1 | Gray |
| HPMDB272J3DLHXLX | 0.0027 | 272 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 12.15 | 1.2 | 1 | Gray |
| HPMDB332J3DLHXLX | 0.0033 | 332 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 14.85 | 1.5 | 1 | Gray |
| HPMDB392J3DLHXLX | 0.0039 | 392 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 17.55 | 1.7 | 1 | Gray |
| HPMDB472J3DLHXLX | 0.0047 | 472 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 21.15 | 1.8 | 1 | Gray |
| HPMDB562J3DLHXLX | 0.0056 | 562 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 25.2 | 2.0 | 1 | Gray |
| HPMDB682J3DLHXLX | 0.0068 | 682 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 30.6 | 2.2 | 1 | Gray |
| HPMDB822J3DLHXLX | 0.0082 | 822 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 36.9 | 2.4 | 1 | Gray |
| HPMDB103J3DLHXL1 | 0.01 | 103 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 45 | 2.7 | 1 | Gray |
| HPMDB123J3DLHXLX | 0.012 | 123 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 54 | 2.9 | 1 | Gray |
| HPMDB153J3DLHXL1 | 0.015 | 153 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 67.5 | 3.3 | 1 | Gray |
| HPMDB183J3DLHXLX | 0.018 | 183 | 5 | 2000 | 700 | 26.5 | 15.0 | 6.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 81 | 3.6 | 1 | Gray |
| HPMDB223J3DLHXLX | 0.022 | 223 | 5 | 2000 | 700 | 26.5 | 16.5 | 7.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 99 | 4.1 | 1 | Gray |
| HPMDB273J3DLHXLX | 0.027 | 273 | 5 | 2000 | 700 | 26.5 | 16.5 | 7.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 121.5 | 4.5 | 1 | Gray |
| HPMDB333J3DLHXLX | 0.033 | 333 | 5 | 2000 | 700 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 4500 | 148.5 | 5.2 | 1 | Gray |

| HITANO P/N | CAP.(uF) | Symbol | Tol.± % | R.V. (DC) | R.V. (AC) | Dimensions in mm | | | | | | | dV/dt (V/uS) | Ipeak (A) | Irms 100KHz (A) | Fig. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | W ±1.0 | H ±1.0 | T ±1.0 | P ±0.5 | S ±0.5 | ϕd ±0.05 | L Min | | | | | |
| HPMDB393J3DLHXLX | 0.039 | 393 | 5 | 2000 | 700 | 26.0 | 17.0 | 8.5 | 22.5 | NA | 0.8 | 15.0 | 4500 | 175.5 | 5.6 | 1 | Gray |
| HPMDB563J3DLHXLX | 0.056 | 563 | 5 | 2000 | 700 | 26.0 | 20.0 | 11.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 252 | 5.4 | 1 | Gray |
| HPMDB683J3DLHXL1 | 0.068 | 683 | 5 | 2000 | 700 | 26.0 | 21.5 | 12.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 306 | 6.0 | 1 | Gray |
| HPMDB823J3DLHXLX | 0.082 | 823 | 5 | 2000 | 700 | 26.5 | 23.0 | 13.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 369 | 6.8 | 1 | Gray |
| HPMDB104J3DLHXL1 | 0.1 | 104 | 5 | 2000 | 700 | 26.0 | 25.0 | 15.0 | 22.5 | NA | 0.8 | 15.0 | 4500 | 450 | 8.1 | 1 | Gray |
| HPMDB333J3DLKXLX | 0.033 | 333 | 5 | 2000 | 700 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 82.5 | 4.9 | 1 | Gray |
| HPMDB393J3DLKXLX | 0.039 | 393 | 5 | 2000 | 700 | 32.0 | 18.0 | 9.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 97.5 | 5.6 | 1 | Gray |
| HPMDB473J3DLKXLX | 0.047 | 473 | 5 | 2000 | 700 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 117.5 | 6.1 | 1 | Gray |
| HPMDB563J3DLKXLX | 0.056 | 563 | 5 | 2000 | 700 | 32.0 | 20.0 | 11.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 140 | 5.9 | 1 | Gray |
| HPMDB683J3DLKXLX | 0.068 | 683 | 5 | 2000 | 700 | 31.5 | 21.6 | 13.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 170 | 6.5 | 1 | Gray |
| HPMDB104J3DLKXLX | 0.1 | 104 | 5 | 2000 | 700 | 31.0 | 25.0 | 14.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 250 | 8.3 | 1 | Gray |
| HPMDB124J3DLKXLX | 0.12 | 124 | 5 | 2000 | 700 | 31.0 | 25.0 | 14.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 300 | 6.6 | 1 | Gray |
| HPMDB154J3DLKXLX | 0.15 | 154 | 5 | 2000 | 700 | 32.0 | 28.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 375 | 7.4 | 1 | Gray |
| HPMDB184J3DLKXLX | 0.18 | 184 | 5 | 2000 | 700 | 32.0 | 28.0 | 18.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 450 | 8.5 | 1 | Gray |
| HPMDB224J3DLKXLX | 0.22 | 224 | 5 | 2000 | 700 | 32.0 | 37.0 | 22.0 | 27.5 | NA | 0.8 | 15.0 | 2500 | 550 | 9.4 | 1 | Gray |

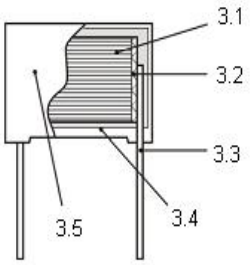
## Performance Characteristics

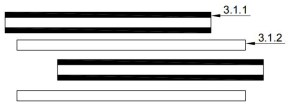
| | | | | | |
|---|---|---|---|---|---|
| Dielectric | Polypropylene film | | | | |
| Plates | Double sided metallized polyester film | | | | |
| Winding | Non-inductive type | | | | |
| Leads | Tinned wire | | | | |
| Protection | Plastic case, thermosetting resin filled. Box material is solvent resistant and flame retardant according to UL94. | | | | |
| Related Documents | IEC 60384–16 | | | | |
| Rated Voltage VR | 630 VDC<br>400 VAC | 1,000 VDC<br>400 VAC | 1,000 VDC<br>600 VAC | 1,600 VDC<br>650 VAC | 2,000 VDC<br>700 VAC |
| Capacitance Range (µF) | 0.0039 – 3.9 | 0.00022 – 0.0033 | 0.00047 – 2.2 | 0.0022 – 1.2 | 0.0001 – 0.56 |
| Capacitance Values | E12 series (IEC 60063) measured at 1 kHz and +20±1°C | | | | |
| Capacitance Tolerance | ±2.5%, ±5%, ±10% | | | | |
| Operating Temperature Range | −40°C to +110°C | | | | |
| Rated Temperature TR | +85°C for $V_R$ (DC and AC) | | | | |
| Voltage Derating | The following decreasing factor has to be applied on the rated voltage:<br>+85°C to +110°C: 1.25% per °C for $V_R$ (DC and AC) | | | | |
| Climatic Category | 55/110/56 IEC 60068–1 | | | | |
| Storage Conditions | Storage time: ≤ 24 months from the date marked on the label package | | | | |
| | Average relative humidity per year ≤ 70% | | | | |
| | RH ≤ 85% for 30 days randomly distributed throughout the year | | | | |
| | Dew is absent | | | | |
| | Temperature: −40 to 80°C (see "Maximum Humidity in Storage Conditions" graph below) | | | | |
| Test Voltage | 1.6 x $V_R$ VDC for 2 seconds (between terminations) at +25°C ±5°C | | | | |
| Capacitance Drift | Maximum 0.5% after a 2 year storage period at a temperature of +10°C to +40°C and a relative humidity of 40% to 60% | | | | |
| Maximum Pulse Steepness | dV/dt according to Table 1. For working voltages lower than rated voltage ($V < V_R$), the specified dV/dt can be multiplied by the factor $V_R/V$. | | | | |
| Reliability (Reference IEC 61709) | Operational life > 200,000 hours at 85°C | | | | |
| | Failure rate ≤ 1 FIT, T = +40°C, V = 0.5 x $V_R$ | | | | |
| | Failure criteria: open or short circuit, cap. change > 10%, DF 2 times the catalog limits, IR < 0.005 x initial limit | | | | |
| Temperature Coefficient | −(200±100) ppm/°C at 1 kHz | | | | |
| Self-Inductance (Lead Length ~ 2 mm) | Lead Spacing (mm) | 7.5 | 10 | 15 | 22.5 | 27.5 | 37.5 |
| | L (nH) ≈ | 8 | 9 | 10 | 16 | 18 | 20 |
| | Max 1 nH per 1 mm lead and capacitor length | | | | | | |

## Performance Characteristics cont.

| | | | | |
|---|---|---|---|---|
| Dissipation Factor tanδ | Measured at 25°C ±5°C | | | |
| | Frequency | C ≤ 0.1 μF | 0.1 μF < C ≤ 1.0 μF | C > 1μF |
| | 1 kHz | ≤ 0.05% | ≤ 0.05% | ≤ 0.05% |
| | 10 kHz | ≤ 0.06% | ≤ 0.07% | -- |
| | 100 kHz | ≤ 0.15% | -- | -- |
| Insulation Resistance | Measured at +25°C, 100 VDC 60 seconds | | | |
| | Minimum Values Between Terminals | | | |
| | C ≤ 0.33 μF | | C > 0.33 μF | |
| | ≥ 100,000 MΩ<br>( ≥ 500,000 MΩ )* | | ≥ 30,000 MΩ • μF<br>( ≥ 150,000 MΩ • μF )* | |

* Typical value

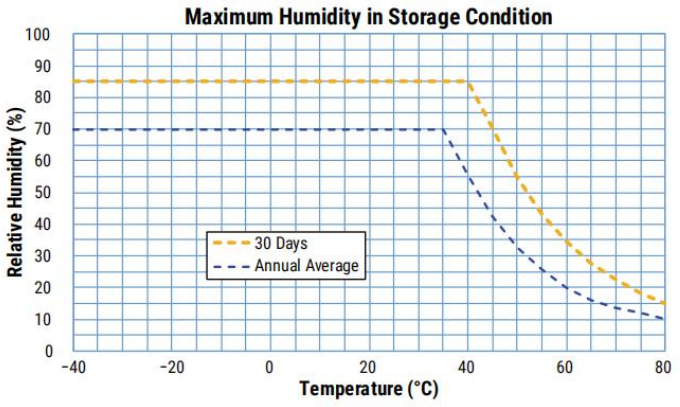
| **CONSTRUCTION** | | |
|---|---|---|
| DIELECTRIC | |  |
| Double-sided Metallized Polyester Carrier Film | | |
| Polypropylene Film Dielectric | | |
| Single-sided Metallized Polypropylene Film | | |
| METAL SPRAY | Special Solder | |
| LEAD WIRE | LEAD WIRE DIAMETER 0.6/0.8/1.0mm | |
| EPOXY RESIN | UL 94V-0 | |
| PLASTIC CASE | UL 94V-0 | |

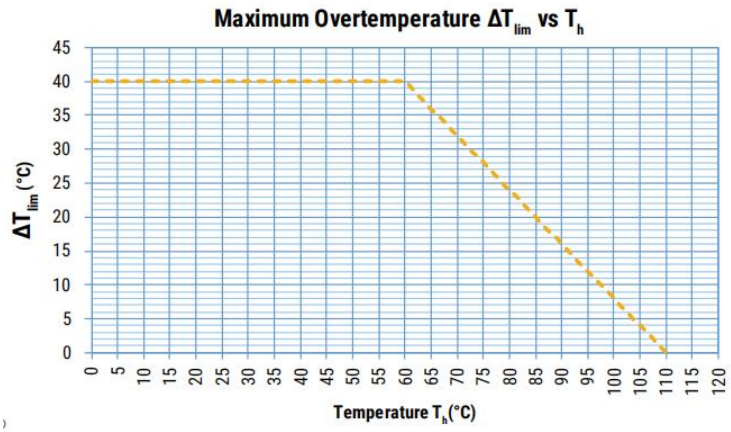


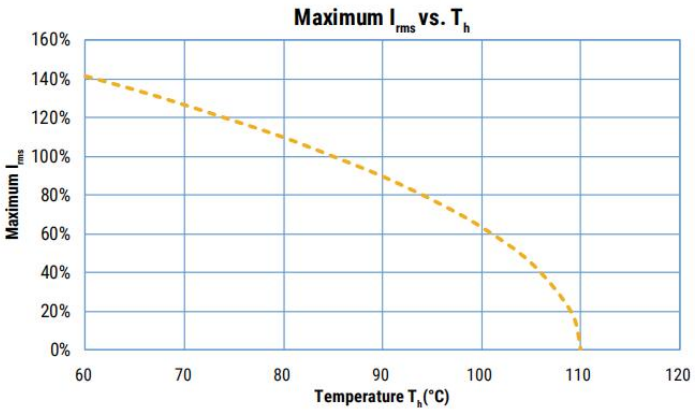

Rated Voltage：＜630VDC


Rated Voltage：≧630VDC

| **MARKING** | | |
|---|---|---|
| TYPE OR MATERIAL | “PMD” stands for “PMD” type. | example |
| NOMINAL CAPACITANCE | In EIA 3-digit code.<br>(Reference Product code comparative table) |  |
| CAPACITANCE TOLERANCE | In EIA 1- letter code.<br>(Reference Product code comparative table) | |
| RATED VOLTAGE | in VDC rating, unless otherwise indicated. | |
| DATE CODE | D | |



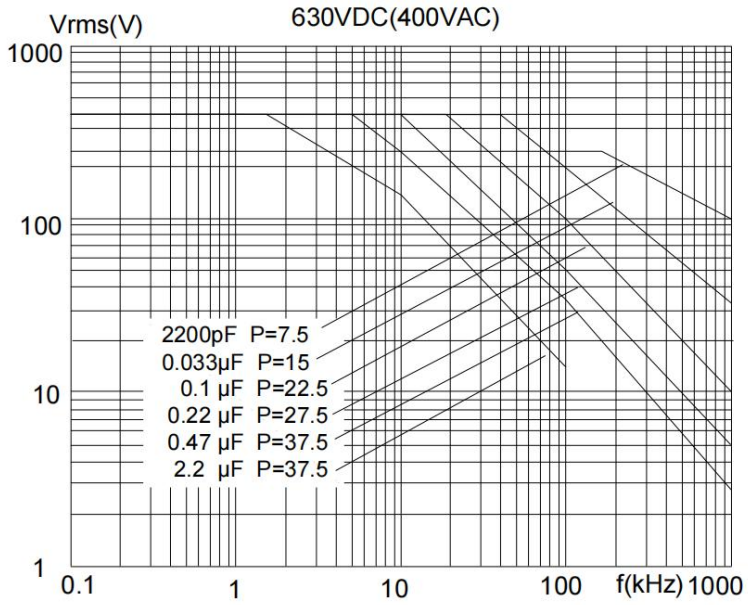



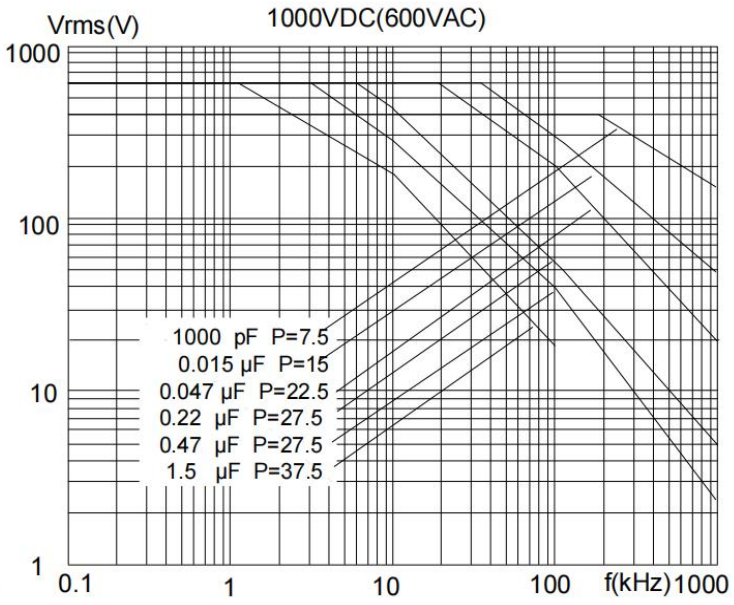



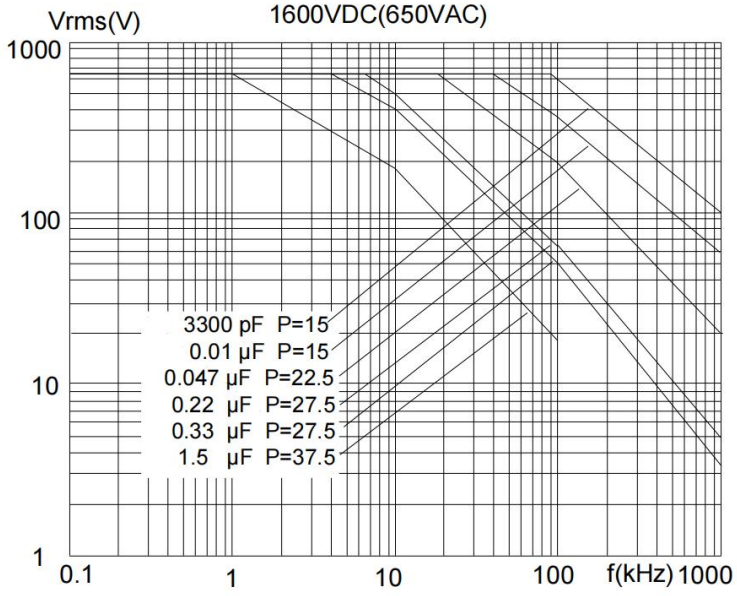

$T_h$ is the maximum ambient temperature surrounding the capacitor or hottest contact point (e.g. tracks), whichever is higher, in the worst operation conditions in °C.

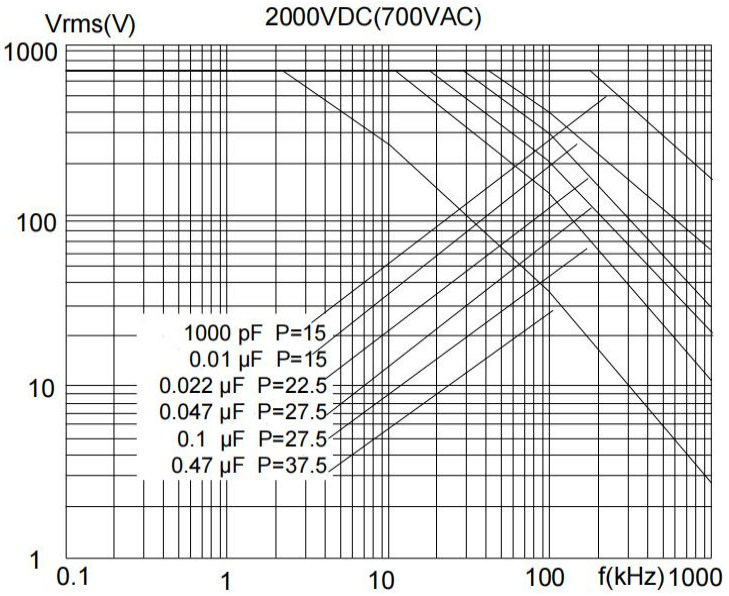
Maximum Voltage (Vrms) Versus Frequency

(Temperature of capacitor surface ≦ 85℃,Temperature rise:△T≦ 20℃)



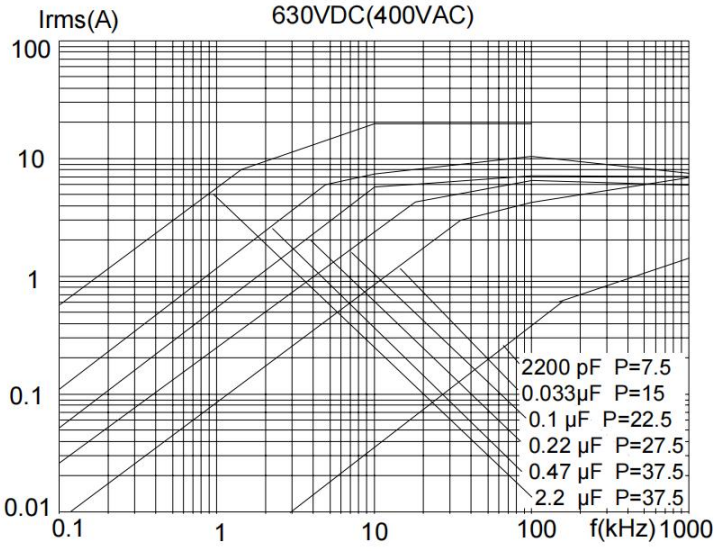



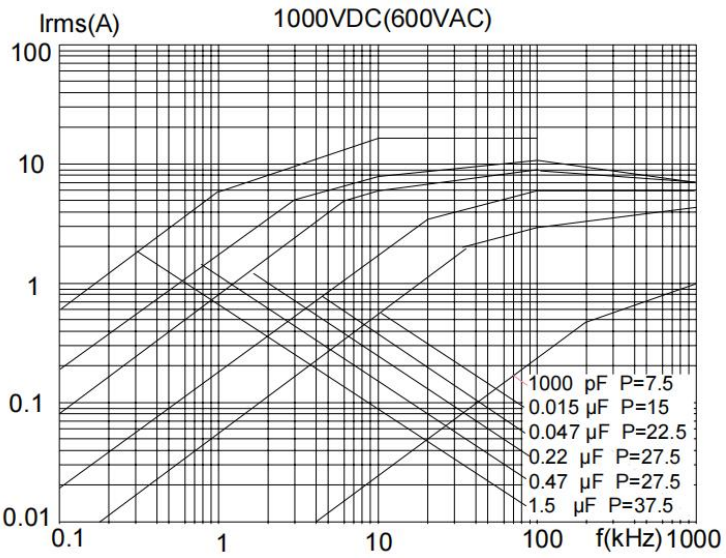



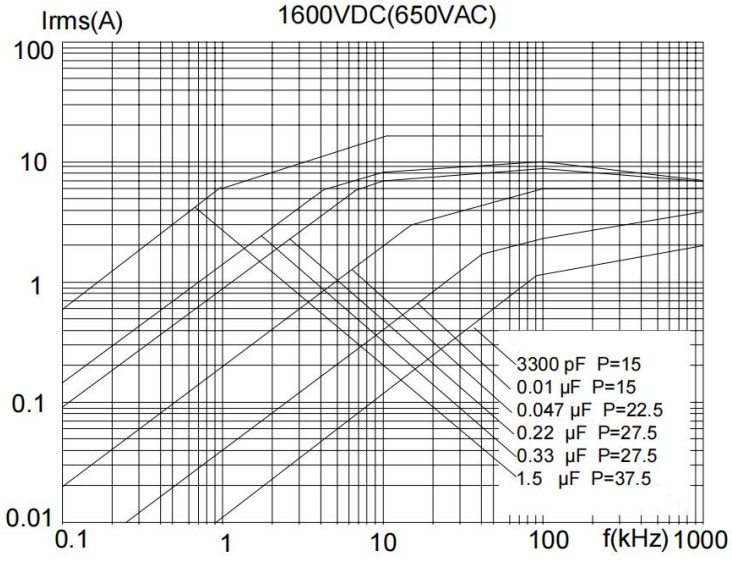



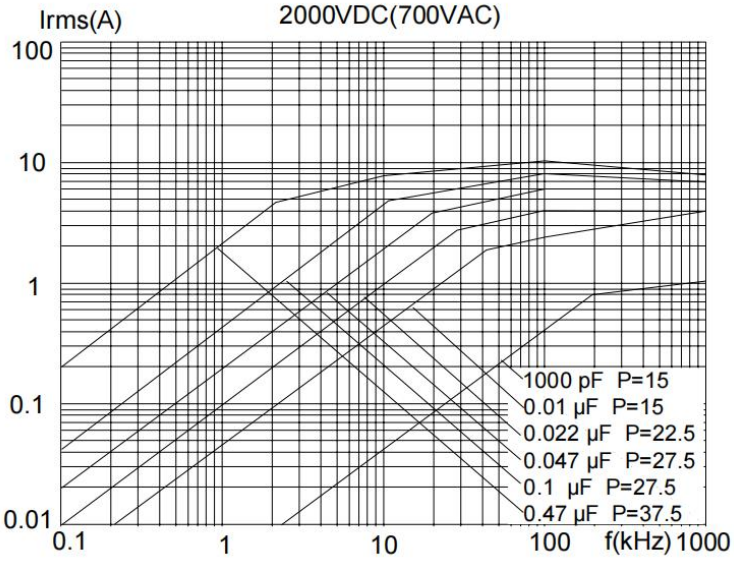
Maximum Current (Irms) Versus Frequency

(Temperature of capacitor surface ≦ 85℃,Temperature rise:△T≦ 20℃)



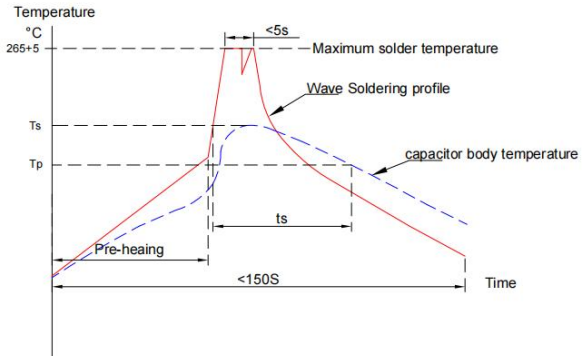
**Regulation in useage**

**1 Soldering suggestions**

When soldering a capacitor, heat in soldering is conducted to the element of the capacitor from wire lead and an enclosure, and hence it should be noted that soldering under high temperature and a long period may cause deterioration of breakdown of capacitors. characteristic or Be sure to solder within the following temperature condition range.

$T_S$ : Capactitor body maximum temperature at wave soldering

$T_p$ : Capactitor body maximum temperature at pre-heating




**Body temperature should follow the description below:**

Polypropylene film capacitor

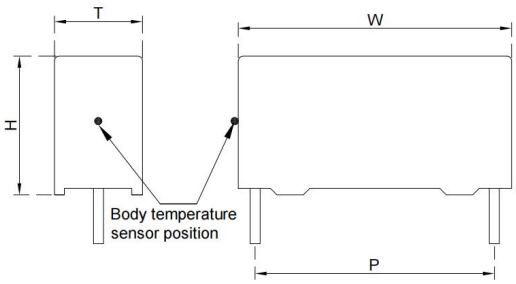
During pre-heating: $T_P \leq 110℃$

During soldering: $T_S \leq 120℃$, $t_S \leq 45s$

Polyester film capacitor

During pre-heating: $T_P \leq 125℃$

During soldering: $T_S \leq 160℃$, $t_S \leq 45s$




■ Remark: When the thickness of the finished capacitor T≤5mm, please appropriately increase the chain speed, reduce the preheating time and lower the preheating temperature to avoid damage to the capacitor core by heat conduction.

■ When SMD components are used togetther with leaded ones, the film capacitors should not pass into the SMD adhesive curing oven. The leaded components should be assembled after the SMD curing step.

■ Leaded film capactitors are not suitable for reflow soldering.

■ In order to ensure proper conditions for manual or selective soldering, the body temperature of the capacitor($T_S$) must be ≤120℃.

■ One reconmended condition for manua soldering is that the tip of the soldering iron should be < 360℃ and the soldering contact time should be no longer than 3 seconds.

■ For uncoated MPE capacitors with lead spacings ≤10mm the following measures are recommended:

1. pre-heating to not more than 110 ℃ in the preheater phase
2. rapid cooling after solerding

■ If re-work or dipping twice in necessary, it should be done after the capacitor retruned to the normal temperature. Suggestion time is 24 hours.

■ The body temperature sensor position is define as the highest temperature point around the capacitor body. If there is 90 degree bending product,the sensor position shall be between product and PCB.