



## Type: MPX (Class-X2)

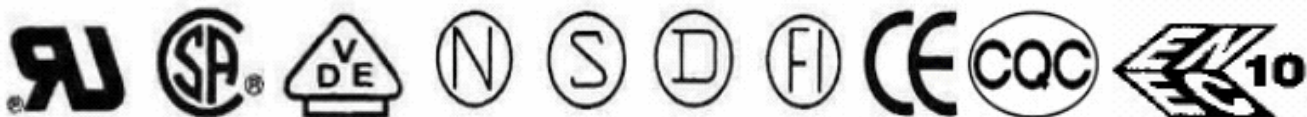
They are interference suppression class X2, and across-the-line capacitors.

### ■ Electrical Characteristics

- Operating Temperature : In accordance with DIN EN60384-14 GMF.  
Minimum Limit Temperature : G = -40  
Maximum Limit Temperature: M = +110
- Capacitance Tolerance : K ( $\pm 10\%$ ), M ( $\pm 20\%$ )
- Range Capacitance : 0.001  $\mu\text{F}$  ~ 1.0  $\mu\text{F}$
- Dissipation Factor : 0.1% Max. at 1 KHz and 25
- Insulation Resistance : 15000 $\text{M}\Omega$  (Min.) for C 0.33 $\mu\text{F}$   
5000 $\text{M}\Omega \cdot \mu\text{F}$  for C > 0.33 $\mu\text{F}$
- Dielectric Strength : 2000 VDC for 1 sec.
- Rated Voltage : 275 VAC for VDE, SEMKO, CQC, NEMKO, DEMKO, FIMKO, CE,  
ENEC; 250 VAC for UL, CSA.

### ■ Mechanical Performance:

- a) Tensile Strength : While applied load of 0.5kg-1.0kg to wire, the body of capacitor shall be haul 90 degree and return to the original position. After the test no breaking and loosening of the terminal shall be found. [Wire = 0.6mm load 0.5kg, Wire = 0.8mm load 1.0 kg]
- b) Vibration : Range of vibration frequency 10-55 Hz , 1.5mm amplitude, 2 hours, each in 3 directions. After test no open and short-circuit happened. And no damage in element junction and appearance.
- c) Soldering heat resistance : Solder temp.  $260 \pm 5$  3  $\pm 0.5$  sec.  
Depth of dipping shall be up to  $2 \pm 0.5$ mm. After the immersion is finished, the capacitor shall able along at ordinary temperature and humidity for 1 hour. After test, Capacitance change 1%  
DF 3%
- d) Humidity life test : Temp. 60 and humidity 90-95% R.H. and W.V. for 500 hours then keep at room temperature. Appearance and dielectric strength are no damage. Capacitance change 5% DF change 3%
- e) Heat life test : 140% W.V. 85 , 1000 hours, then keep 2 hours at room temperature. Appearance is no damage. After test, Capacitance Change 1% DF change 3%



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**■ Electrical Characteristics**

Operating Temperature : In accordance with DIN EN60384-14 GMF.

Minimum Limit Temperature : G=-40

Maximum Limit Temperature : M=+110

Capacitance Tolerance : K ( $\pm 10\%$ ) ,M ( $\pm 20\%$ )Rated Capacitance : 0.001 $\mu$ F ~ 1.0  $\mu$ F

Dissipation Factor : 0.1% Max., at 1 KHz and 25

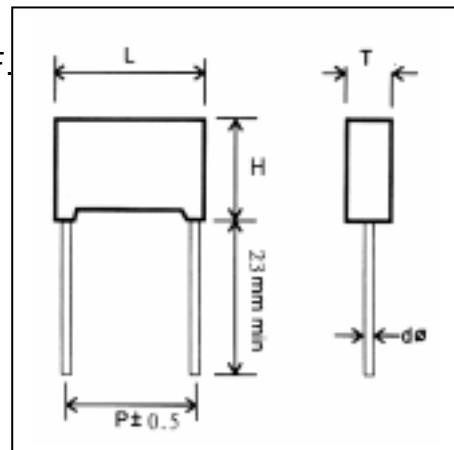
Insulation Resistance : 15000M for C 0.33 $\mu$ F5000M  $\mu$ F for C > 0.33 $\mu$ F

Rated Voltage : 275 VAC for VDE, SEMKO, CQC.

NEMKO, DEMKO, FIMKO, CE, ENEC.

250 VAC for UL, CSA.

Dielectric Strength : 2000 VDC for 1 sec.

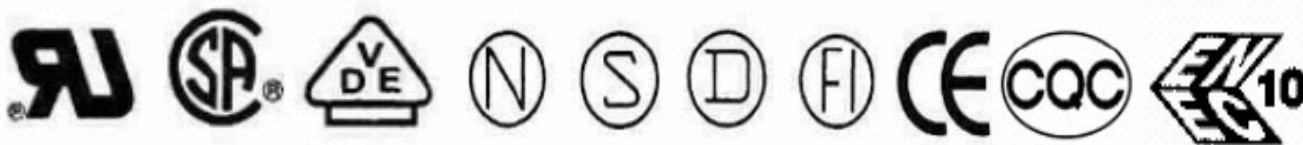
**■ Dimensions: (mm)**

| CODE    | MFD        | 250/275VAC |      |      |             |              |
|---------|------------|------------|------|------|-------------|--------------|
|         |            | L          | H    | T    | P $\pm 0.5$ | d $\pm 0.08$ |
| 102-103 | 0.001-0.01 | 13.0       | 11.0 | 5.0  | 10.0        | 0.6          |
| 103     | 0.01       | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 123     | 0.012      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 153     | 0.015      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 183     | 0.018      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 223     | 0.022      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 273     | 0.027      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 333     | 0.033      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 393     | 0.039      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 473     | 0.047      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 563     | 0.056      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 683     | 0.068      | 18.0       | 11.0 | 5.0  | 15.0        | 0.8          |
| 823     | 0.082      | 18.0       | 12.0 | 6.0  | 15.0        | 0.8          |
| 104     | 0.1        | 18.0       | 12.0 | 6.0  | 15.0        | 0.8          |
| 124     | 0.12       | 18.0       | 13.5 | 7.5  | 15.0        | 0.8          |
| 154     | 0.15       | 18.0       | 14.5 | 8.5  | 15.0        | 0.8          |
| 184     | 0.18       | 18.0       | 14.5 | 8.5  | 15.0        | 0.8          |
| 224     | 0.22       | 26.5       | 16.5 | 7.0  | 22.5        | 0.8          |
| 274     | 0.27       | 26.5       | 17.0 | 8.5  | 22.5        | 0.8          |
| 334     | 0.33       | 26.5       | 17.0 | 8.5  | 22.5        | 0.8          |
| 394     | 0.39       | 26.5       | 19.0 | 10.0 | 22.5        | 0.8          |
| 474     | 0.47       | 26.5       | 19.0 | 10.0 | 22.5        | 0.8          |
| 474     | 0.47       | 32.0       | 20.0 | 11.0 | 27.5        | 0.8          |
| 564     | 0.56       | 32.0       | 20.0 | 11.0 | 27.5        | 0.8          |
| 684     | 0.68       | 32.0       | 20.0 | 11.0 | 27.5        | 0.8          |
| 824     | 0.82       | 32.0       | 22.0 | 13.0 | 27.5        | 0.8          |
| 105     | 1.0        | 32.0       | 22.0 | 13.0 | 27.5        | 0.8          |



DAIN ELECTRONICS CO., LTD.

**INTERFERENCE SUPPRESSION CAPACITOR**



Type: MPX-mini

■ Dimensions: (mm)

| CODE | MFD   | 250/275VAC |      |      |       |        |
|------|-------|------------|------|------|-------|--------|
|      |       | L          | H    | T    | P±0.5 | d±0.08 |
| 223  | 0.022 | 13         | 11   | 5    | 10    | 0.6    |
| 273  | 0.027 | 13         | 11   | 5    | 10    | 0.6    |
| 333  | 0.033 | 13         | 11   | 5    | 10    | 0.6    |
| 473  | 0.047 | 13         | 11   | 5    | 10    | 0.6    |
| 563  | 0.056 | 13         | 11   | 5    | 10    | 0.6    |
| 683  | 0.068 | 13         | 11   | 5    | 10    | 0.6    |
| 823  | 0.082 | 13         | 12   | 6    | 10    | 0.6    |
| 104  | 0.1   | 13         | 12   | 6    | 10    | 0.6    |
| 104  | 0.1   | 18         | 11   | 5    | 15    | 0.8    |
| 124  | 0.12  | 18         | 12   | 6    | 15    | 0.8    |
| 154  | 0.15  | 18         | 13.5 | 6.2  | 15    | 0.8    |
| 224  | 0.22  | 18         | 14.5 | 8.5  | 15    | 0.8    |
| 224  | 0.22  | 18         | 16   | 10   | 15    | 0.8    |
| 334  | 0.33  | 18         | 16   | 10   | 15    | 0.8    |
| 474  | 0.47  | 18         | 16   | 10   | 15    | 0.8    |
| 684  | 0.68  | 26.5       | 19   | 10   | 22.5  | 0.8    |
| 105  | 1.0   | 26.5       | 21.5 | 12.5 | 22.5  | 0.8    |

**DAIN's products are RoHs.**

If you would like to have any special size, please contact with us for more details.



# QUALITY CONTROL

## The latest Safety Regulation Approval

### INTERFERENCE SUPPRESSION CAPACITOR: MPX series

Capacitance Rating: 0.001uf ~ 1.0uF

Tolerance: K (±10%), M (±20%)

Voltage Rating: 250VAC / 275VAC

| Approve Date | Approve Monogram | Country | Related Standard   |
|--------------|------------------|---------|--|
| Dec 1, 1996  | CE               | FINLAND | EN132400 : 1994 / IEC384-14 2nd 73/23/EEC / 93/68/EEC  |
| Nov 7, 1996  | CSA              | CANADA  | CAN/CSA-C22.2 NO.1 & 2 NO.0-M91 & 1-M94  |
| Sep 07, 2006 | DEMKO            | DENMARK | EN132400:1994+A2:98+A3:98+A4:2001  |
| SEP 06 ,2006 | ENEC             | EEPCA   | DIN EN60384-14 (VDE 0565 Teil 1-1); 2006-04; EN 60384-14; 2005-08 IEC 60384-14(ed.3)         |
| Aug 16, 2006 | FIMKO            | FINLAND | EN132400:1994+A2:1998+A3:1998+A4:2001/IEC 60384-14:1993 2nd Edition +A1:1995                 |
| Sep 13, 2004 | NEMKO            | NORWAY  | EN132400:1994; A2; A3; A4/ IEC 60384-14 (ed 2); A1   |
| Nov 15, 1996 | SEMKO            | SWEDEN  | EN132400 :1994/ IEC384-14 2nd EN132400:1994 and A2+A3+A4 IEC60384-14:1993 and A1             |
| Jul 17, 2001 | UL               | U.S.A.  | UL1414, UL1283Jun 19, 2003-Antenna-coupling capacitors, (mini size) Type MPX –NEW DIMENSIONS |
| Sep 06, 2006 | VDE              | GERMANY | DIN EN60384-14 (VDE 0565 Teil 1-1); 2006-04; EN 60384-14; 2005-08 IEC 60384-14(ed.3)         |
| Aug 29, 2003 | CQC              | CHINA   | GB/T 14472-1998  |