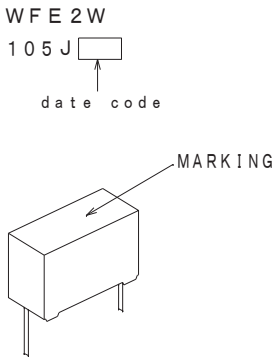
THIRD ANGLE PROJECTION

| | ITEM CODE | CAPACITANCE μF | ( * ) | DIMENSIONS L | T | H | F | d | P | Q | VOLUME (mm³) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| △1 | ECWFE2W104 () A | 0.10 | (104) | 13.0 | 5.0 | 10.5 | 10.0 | 0.6 | 0±0.8 | 1.5 | 683 | |
| | 〃 2W154 () A | 0.15 | (154) | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | |
| | 〃 2W224 () A | 0.22 | (224) | 〃 | 6.0 | 12.0 | 〃 | 〃 | 〃 | 〃 | 936 | |
| | 〃 2W334 () A | 0.33 | (334) | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | |
| | 〃 2W474 () A | 0.47 | (474) | 17.5 | 〃 | 11.5 | 15.0 | 0.8 | 〃 | 1.3 | 1208 | |
| △1 | 〃 2W684 () A | 0.68 | (684) | 〃 | 7.0 | 12.5 | 〃 | 〃 | 〃 | 〃 | 1531 | |
| | 〃 2W105 () A | 1.0 | (105) | △2 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | △1 〃 | 〃 | |
| △1 | 〃 2W155 () A | 1.5 | (155) | 〃 | 10.0 | 15.5 | 〃 | 〃 | 〃 | 〃 | 2713 | * |
| | 〃 2W225 () A | 2.2 | (225) | △2 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | △1 〃 | 〃 | * |
| △1 | 〃 2W335 () A | 3.3 | (335) | 26.0 | 〃 | 17.0 | 22.5 | 〃 | 〃 | 1.8 | 4420 | * |
| △1 | 〃 2W475 () A | 4.7 | (475) | 〃 | 12.0 | 19.0 | 〃 | 〃 | 〃 | 〃 | 5928 | * |

Note

*The specimen (the volume is more than 1750mm³) shall be satisfied with IEC60384-1 Inflammability Category B based on IEC60065, 1998~

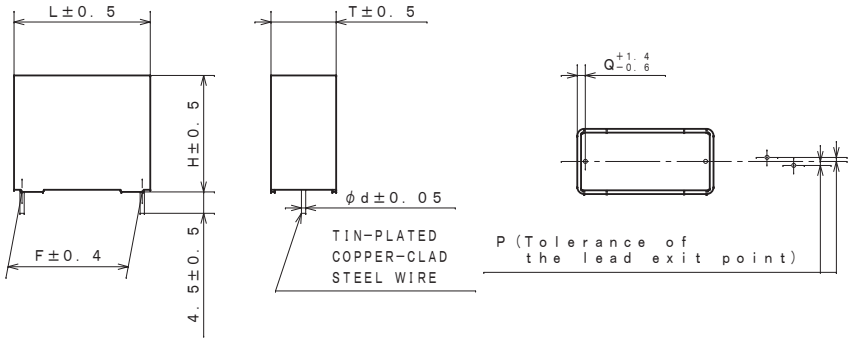
## MARKING EXAMPLE




## ALTERATION

| ISSUE | DESCRIPTION | DATE |
|---|---|---|
| △1 | Addition (104~475)<br>Changed: DIMENSIONS<br>Q (1.25→1.3: 105, 225)<br>Company name changed | Sep. 3 2015 |
| △2 | Company name changed | Apr. 1 2022 |

SPECIFICATIONS No.




・F: regulation of the root

## ITEM CODE NUMBER STRUCTURE

ECWFE 2W 105 J A (450VDC, 1.0μF, ±5%)

- A: Short Leads
- J: Capacitance tolerance (J=±5%, K=±10%)
- 105: Capacitance : See table (*)
- 2W: Rated voltage (2W・・450VDC)

## CONSTRUCTION

The capacitor is of non-inductive construction, wound with metallized polypropylene film dielectric. The capacitor is enclosed in non-combustible polybutylene telephthalate case, filled with non-combustible epoxy resin and has two leads.

## MARKING

Marking comprises capacitance, capacitance tolerance, rated voltage and date code.

## PROPERTIES

| | |
|---|---|
| *Capacitance | : See table at 1kHz. |
| *Capacitance tolerance | : ±5% (J), ±10% (K) at 1kHz. |
| *Rated voltage | : 450VDC (Derating of rated voltage by 1.25%/℃ at more than 85℃) |
| *Withstand voltage (terminal-terminal) | : 450VDC×150% for 60s |
| *Insulation resistance | : ≧30000MΩ (C≦0.33μF) at 100VDC, 20℃ for 60s<br>: ≧10000MΩ・μF (C>0.33μF) at 100VDC, 20℃ for 60s |
| *Dissipation factor | : ≦0.1% at 1kHz, 20℃ |
| *Category temperature range (including temperature rise on unit surface) | : From −40℃ to +105℃ |

## PACKING QUANTITY

| | Capacitance range (μF) | Quantity (pcs.) |
|---|---|---|
| △1 | 0.1 ~ 0.15 | 1300 |
| | 0.22~ 1.0 | 1000 |
| | 1.5 ~ 2.2 | 600 |
| | 3.3 | 300 |
| △1 | 4.7 | 200 |

## QUANTITY of MINIMUM ORDER

| | Capacitance range (μF) | Quantity (pcs.) |
|---|---|---|
| △1 | 0.1 ~ 1.0 | 1000 |
| | 1.5 ~ 2.2 | 600 |
| | 3.3 | 300 |
| △1 | 4.7 | 200 |

| | |
|---|---|
| DESIGN | M. MEKADA |
| CHECKED | T. TANAKA |
| APPROVAL | T. KATO |
| ESTABLISHMENT | Apr. 14. 2014 |
| TYPE NAME | ECWFE2W*** () A |
| NAME | Metallized Polypropylene Film Capacitor |
| DRAWING NAME | PRODUCT DRAWING |
| DRAWING No. | B013J-J-E (1/1) |

REFERENCE


Film Capacitor Business Unit
Device Solutions Business Division
Panasonic Industry Co., Ltd.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THIRD ANGLE PROJECTION

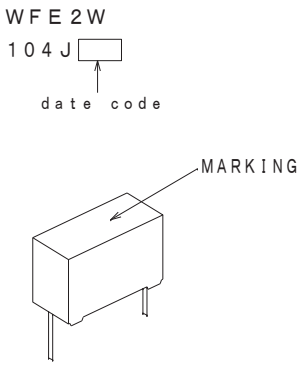
| | ITEM CODE | CAPACITANCE μF | ( * ) | DIMENSIONS L | T | H | F | d | P | Q | VOLUME (mm³) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ECWFE2W104** | 0.10 | (104) | 17.5 | 5.0 | 10.5 | 15.0 | 0.6 | 0±0.8 | 1.25 | 919 | |
| | 〃 2W154** | 0.15 | (154) | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | |
| | 〃 2W224** | 0.22 | (224) | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | |
| | 〃 2W334** | 0.33 | (334) | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | 〃 | |
| 1 | 〃 2W335** | 3.3 | (335) | 31.0 | 13.0 | 23.0 | 27.5 | 0.8 | 〃 | 1.75 | 9269 | * |
| 1 | 〃 2W475** | 4.7 | (475) | 〃 | 15.5 | 25.5 | 〃 | 〃 | 〃 | 〃 | 12253 | * |

PD=±5%(J)
QD=±10%(K)

Note

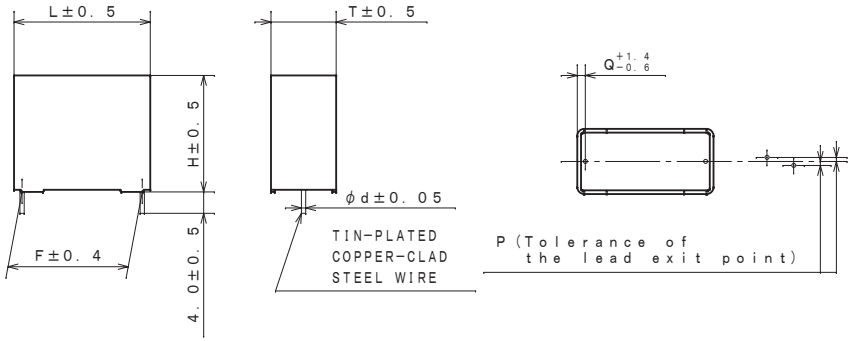
*The specimen (the volume is more than 1750mm³) shall be satisfied with IEC60384-1 Inflammability Category B based on IEC60065, 1998~

## MARKING EXAMPLE




| ALTERATION | | |
|---|---|---|
| ISSUE | DESCRIPTION | DATE |
| 1 | Addition (335, 475) | Feb. 12 2019 |
| 2 | Company name changed | Apr. 1 2022 |
| | | |

SPECIFICATIONS No.




・F: regulation of the root

## ITEM CODE NUMBER STRUCTURE

ECWFE 2W 104 PD (450VDC, 0.1μF, ±5%)

- PD: Short Leads, Capacitance tolerance (PD=±5%(J), QD=±10%(K))
- 104: Capacitance : See table(*)
- 2W: Rated voltage (2W・・450VDC)

## CONSTRUCTION

The capacitor is of non-inductive construction, wound with metallized polypropylene film dielectric. The capacitor is enclosed in non-combustible polybutylene telephthalate case, filled with non-combustible epoxy resin and has two leads.

## MARKING

Marking comprises capacitance, capacitance tolerance, rated voltage and date code.

## PROPERTIES

| | | |
|---|---|---|
| *Capacitance | :See table | at 1kHz. |
| *Capacitance tolerance | :±5%(J), ±10%(K) | at 1kHz. |
| *Rated voltage | :450VDC (Derating of rated voltage by 1.25%/℃ at more than 85℃) | |
| *Withstand voltage(terminal-terminal) | :450VDC×150% for 60s | |
| *Insulation resistance | :≧30000MΩ (C≦0.33μF) | at 100VDC, 20℃ for 60s |
| 1 | :≧10000MΩ・μF (C>0.33μF) | at 100VDC, 20℃ for 60s |
| *Dissipation factor | :≦0.1% at 1kHz, 20℃ | |
| *Category temperature range (including temperature rise on unit surface) | :From −40℃ to +105℃ | |

## PACKING QUANTITY

| | Capacitance range (μF) | Quantity (pcs.) |
|---|---|---|
| | 0.1 ~0.33 | 1500 |
| 1 | 3.3 | 200 |
| 1 | 4.7 | 100 |

## QUANTITY of MINIMUM ORDER

| | Capacitance range (μF) | Quantity (pcs.) |
|---|---|---|
| | 0.1 ~0.33 | 1000 |
| 1 | 3.3 | 200 |
| 1 | 4.7 | 100 |

REFERENCE

| | |
|---|---|
| DESIGN | M. MEKADA |
| CHECKED | T. TOYOHIDA |
| APPROVAL | T. KATO |
| ESTABLISHMENT | Dec. 13. 2018 |
| TYPE NAME | ECWFE2W***PD<br>ECWFE2W***QD |
| NAME | Metallized Polypropylene Film Capacitor |
| DRAWING NAME | PRODUCT DRAWING |
| DRAWING No. | H015J-J-E (1/1) |


Film Capacitor Business Unit
Device Solutions Business Division
Panasonic Industry Co., Ltd.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THIRD ANGLE PROJECTION

| ITEM CODE | CAPACITANCE μF ( * ) | DIMENSIONS L | T | H | F | d | P | Q | VOLUME (mm³) | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| ECWFE2W155** | 1.5 (155) | 31.0 | 9.0 | 19.0 | 27.5 | 0.8 | 0±0.8 | 1.75 | 5301 | * |
| 〃 2W225** | 2.2 (225) | 〃 | 11.0 | 21.0 | 〃 | 〃 | 〃 | 〃 | 7161 | * |

PL=±5% (J)
QL=±10% (K)

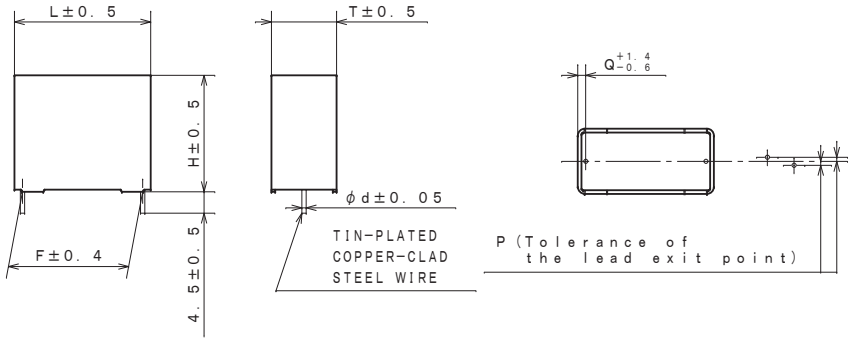
Note

*The specimen (the volume is more than 1750mm³) shall be satisfied with IEC60384-1 Inflammability Category B based on IEC60065, 1998～

## ITEM CODE NUMBER STRUCTURE

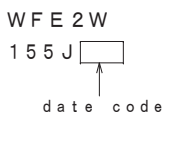
ECWFE 2W 155 PL (450VDC, 1.5μF, ±5%)

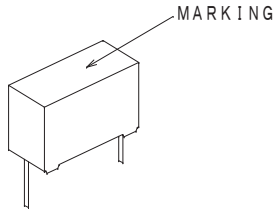
- Short Leads
- Capacitance tolerance (PL=±5% (J), QL=±10% (K))
- Capacitance : See table (*)
- Rated voltage (2W･･450VDC)




･F: regulation of the root

## MARKING EXAMPLE




## PACKING QUANTITY

| Capacitance range (μF) | Quantity (pcs.) |
|---|---|
| 1.5 | 300 |
| 2.2 | 200 |

## QUANTITY of MINIMUM ORDER

| Capacitance range (μF) | Quantity (pcs.) |
|---|---|
| 1.5 | 300 |
| 2.2 | 200 |

## CONSTRUCTION

The capacitor is of non-inductive construction, wound with metallized polypropylene film dielectric. The capacitor is enclosed in non-combustible polybutylene telephthalate case, filled with non-combustible epoxy resin and has two leads.

## MARKING

Marking comprises capacitance, capacitance tolerance, rated voltage and date code.

## PROPERTIES

| | |
|---|---|
| *Capacitance | :See table at 1kHz. |
| *Capacitance tolerance | :±5% (J), ±10% (K) at 1kHz. |
| *Rated voltage | :450VDC (Derating of rated voltage by 1.25%/℃ at more than 85℃) |
| *Withstand voltage (terminal-terminal) | :450VDC×150% for 60s |
| *Insulation resistance | :≧10000MΩ･μF at 100VDC, 20℃ for 60s |
| *Dissipation factor | :≦0.1% at 1kHz, 20℃ |
| *Category temperature range (including temperature rise on unit surface) | :From −40℃ to +105℃ |

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ALTERATION

| ISSUE | DESCRIPTION | DATE |
|---|---|---|
| 1 | Company name changed | Apr. 1 2022 |

SPECIFICATIONS No.

REFERENCE

| | |
|---|---|
| DESIGN | M. MEKADA |
| CHECKED | T. TOMITA |
| APPROVAL | T. KATO |
| ESTABLISHMENT | Feb. 12. 2019 |
| TYPE NAME | ECWFE2W***PL<br>ECWFE2W***QL |
| NAME | Metallized Polypropylene Film Capacitor |
| DRAWING NAME | PRODUCT DRAWING |
| DRAWING No. | J007J-J-E (1/1) |


Film Capacitor Business Unit
Device Solutions Business Division
Panasonic Industry Co., Ltd.

THIRD ANGLE PROJECTION

| ITEM CODE | CAPACITANCE μF ( * ) | DIMENSIONS L | T | H | F | d | P | Q | VOLUME ($mm^3$) | Note |
|---|---|---|---|---|---|---|---|---|---|---|
| ECWFE2W474** | 0.47 (474) | 13.0 | 7.0 | 12.5 | 10.0 | 0.6 | 0±0.8 | 1.5 | 1138 | |

PA=±5%(J)
QA=±10%(K)

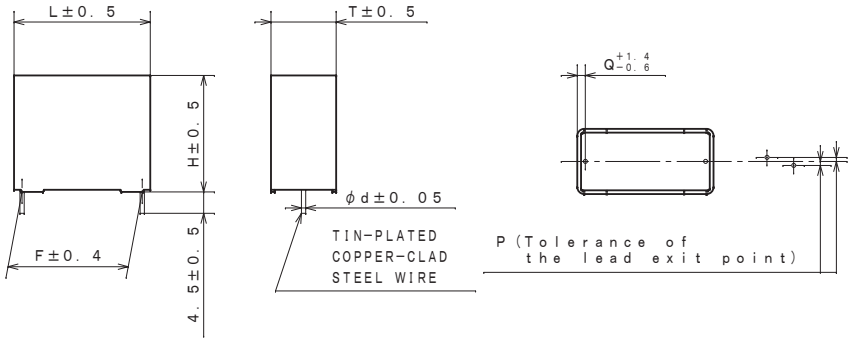
| ALTERATION | | |
|---|---|---|
| ISSUE | DESCRIPTION | DATE |
| 1 | Company name changed | Apr. 1 2022 |

SPECIFICATIONS No.

## ITEM CODE NUMBER STRUCTURE

ECWFE 2W 474 PA (450VDC, 0.47μF, ±5%)

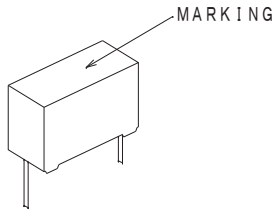
- Capacitance tolerance (PA=±5%(J), QA=±10%(K))
- Capacitance : See table(*)
- Rated voltage (2W··450VDC)




・F:regulation of the root

## MARKING EXAMPLE

WFE2W
474J
date code




## PACKING QUANTITY

| Capacitance range (μF) | Quantity (pcs.) |
|---|---|
| 0.47 | 1200 |

## QUANTITY of MINIMUM ORDER

| Capacitance range (μF) | Quantity (pcs.) |
|---|---|
| 0.47 | 1000 |

## CONSTRUCTION

The capacitor is of non-inductive construction, wound with metallized polypropylene film dielectric. The capacitor is enclosed in non-combustible polybutylene telephthalate case, filled with non-combustible epoxy resin and has two leads.

## MARKING

Marking comprises capacitance, capacitance tolerance, rated voltage and date code.

## PROPERTIES

| | |
|---|---|
| *Capacitance | :See table at 1kHz. |
| *Capacitance tolerance | :±5%(J), ±10%(K) at 1kHz. |
| *Rated voltage | :450VDC (Derating of rated voltage by 1.25%/℃ at more than 85℃) |
| *Withstand voltage(terminal-terminal) | :450VDC×150% for 60s |
| *Insulation resistance | :≧10000MΩ・μF at 100VDC, 20℃ for 60s |
| *Dissipation factor | :≦0.1% at 1kHz, 20℃ |
| *Category temperature range (including temperature rise on unit surface) | :From −40℃ to +105℃ |

REFERENCE

| | |
|---|---|
| DESIGN | M.MEKADA |
| CHECKED | H.YAMADA |
| APPROVAL | T.KATO |
| ESTABLISHMENT | Sep. 3.2015 |
| TYPE NAME | ECWFE2W474PA<br>ECWFE2W474QA |
| NAME | Metallized Polypropylene Film Capacitor |
| DRAWING NAME | PRODUCT DRAWING |
| DRAWING No. | E010J-J-E (1/1) |


Film Capacitor Business Unit
Device Solutions Business Division
Panasonic Industry Co., Ltd.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