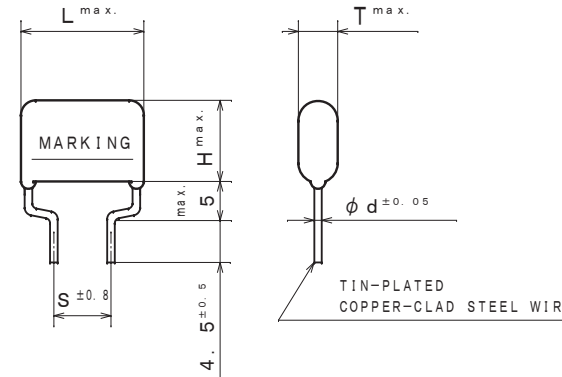


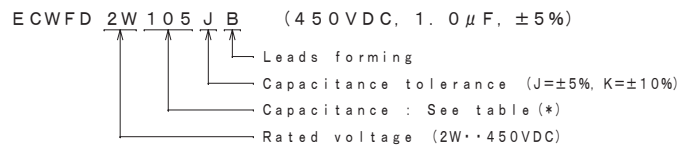
ITEM CODE	CAPACITANCE μF (*)	DIMENSIONS					VOLUME (mm <sup>3</sup> )
		L	T	H	S	d	
ECWFD2W104 () B	0.1 (104)	12.6	4.5	8.9	7.5	0.6	458
" 2W124 () B	0.12 (124)	"	4.6	9.0	"	"	463
" 2W154 () B	0.15 (154)	"	4.6	9.1	"	"	471
" 2W184 () B	0.18 (184)	"	4.8	9.3	"	"	502
" 2W224 () B	0.22 (224)	"	5.0	9.6	"	"	542
" 2W274 () B	0.27 (274)	"	5.3	10.0	"	"	593
" 2W334 () B	0.33 (334)	"	5.6	10.4	"	"	654
" 2W394 () B	0.39 (394)	"	6.0	10.7	"	"	715
" 2W474 () B	0.47 (474)	17.5	5.8	9.0	"	0.8	787
" 2W564 () B	0.56 (564)	"	6.2	9.4	"	"	874
" 2W684 () B	0.68 (684)	"	6.7	9.9	"	"	987
" 2W824 () B	0.82 (824)	"	7.2	10.4	"	"	1116
" 2W105 () B	1.0 (105)	"	7.8	11.0	"	"	1279
" 2W125 () B	1.2 (125)	"	8.5	11.6	"	"	1457
" 2W155 () B	1.5 (155)	"	9.3	12.5	"	"	1718
" 2W185 () B	1.8 (185)	"	10.1	13.3	"	"	1975
" 2W225 () B	2.2 (225)	"	11.1	14.3	"	"	2313
" 2W275 () B	2.7 (275)	25.3	9.0	13.7	15.0	"	2674
" 2W335 () B	3.3 (335)	"	9.8	14.6	"	"	3113
" 2W395 () B	3.9 (395)	"	10.7	15.4	"	"	3546
" 2W475 () B	4.7 (475)	"	11.7	16.4	"	"	4116



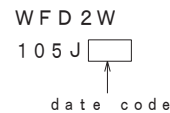
ALTERATION		
ISSUE	DESCRIPTION	DATE
△	Company name changed Correction	Apr. 1 2012
△	Change: category temperature range (+105°C~+110°C) Derating of rated voltage (1.25%/°C~0.62%/°C)	Jul. 9 2012
△	Addition Capacitance (104~394, 275~475)	Nov. 22 2012
△	Company name changed	Apr. 1 2013
△	Company name changed	Apr. 1 2015
△	Company name changed	Apr. 1 2022

SPECIFICATIONS No.

ITEM CODE NUMBER STRUCTURE



MARKING EXAMPLE



PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
△ 0.1 ~ 0.39	5000
0.47 ~ 0.56	3000
0.68	2800
0.82	2600
1.0 ~ 1.2	2000
1.5	1600
1.8	1400
△ 2.2 ~ 2.7	1200
△ 3.3 ~ 3.9	1000
△ 4.7	600

CONSTRUCTION

The capacitor is of non-inductive construction, wound with metallized polypropylene film dielectric.  
The capacitor is enclosed in 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 0.62%/°C at more than 85°C)
- \*Withstand voltage (terminal-terminal) : 450VDC×150% for 60s
- \*Insulation resistance : ≥300000MΩ (C≤0.33μF) at 100VDC, 20°C for 60s  
: ≥100000MΩ·μF (C>0.33μF) at 100VDC, 20°C for 60s
- \*Dissipation factor : ≤0.1% at 1kHz, 20°C
- \*Category temperature range : △ From -40°C to +110°C  
(including temperature rise on unit surface)

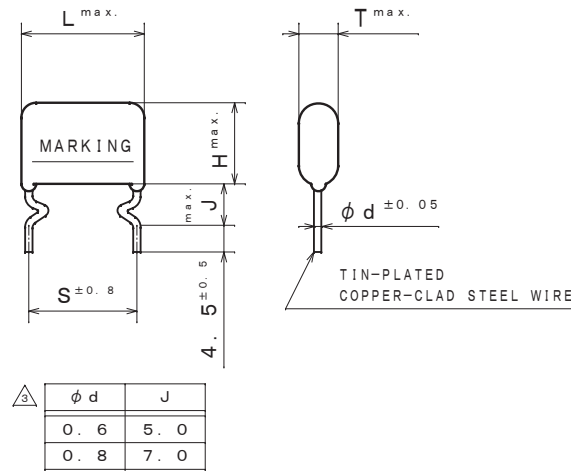
QUANTITY of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
△ 0.47 ~ 3.9	1000
△ 4.7	600

DESIGN	M. MEKADA
CHECKED	H. YAMADA
APPROVAL	T. KATO
ESTABLISHMENT	Mar. 19, 2012
TYPE NAME	ECWFD2W*** () B
NAME	Metallized Polypropylene Film Capacitor
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	B021J-J-E (1/1)

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

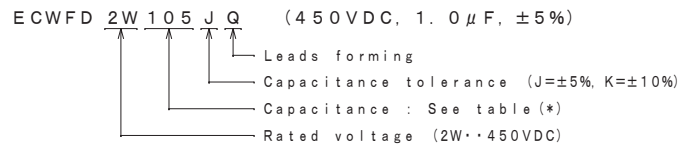
ITEM CODE	CAPACITANCE		DIMENSIONS					VOLUME (mm <sup>3</sup> )
	μF	(*)	L	T	H	S	d	
ECWFD2W104 () Q	0.1	(104)	12.6	4.5	8.9	10.0	0.6	458
" 2W124 () Q	0.12	(124)	"	4.6	9.0	"	"	463
" 2W154 () Q	0.15	(154)	"	4.6	9.1	"	"	471
" 2W184 () Q	0.18	(184)	"	4.8	9.3	"	"	502
" 2W224 () Q	0.22	(224)	"	5.0	9.6	"	"	542
" 2W274 () Q	0.27	(274)	"	5.3	10.0	"	"	593
" 2W334 () Q	0.33	(334)	"	5.6	10.4	"	"	654
" 2W394 () Q	0.39	(394)	"	6.0	10.7	"	"	715
" 2W474 () Q	0.47	(474)	17.5	5.8	9.0	15.0	0.8	787
" 2W564 () Q	0.56	(564)	"	6.2	9.4	"	"	874
" 2W684 () Q	0.68	(684)	"	6.7	9.9	"	"	987
" 2W824 () Q	0.82	(824)	"	7.2	10.4	"	"	1116
" 2W105 () Q	1.0	(105)	"	7.8	11.0	"	"	1279
" 2W125 () Q	1.2	(125)	"	8.5	11.6	"	"	1457
" 2W155 () Q	1.5	(155)	"	9.3	12.5	"	"	1718
" 2W185 () Q	1.8	(185)	"	10.1	13.3	"	"	1975
" 2W225 () Q	2.2	(225)	"	11.1	14.3	"	"	2313
" 2W275 () Q	2.7	(275)	25.3	9.0	13.7	22.5	"	2674
" 2W335 () Q	3.3	(335)	"	9.8	14.6	"	"	3113
" 2W395 () Q	3.9	(395)	"	10.7	15.4	"	"	3546
" 2W475 () Q	4.7	(475)	"	11.7	16.4	"	"	4116



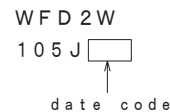
ALTERATION		
ISSUE	DESCRIPTION	DATE
△	Company name changed Correction	Apr. 1 2012
△	Change: category temperature range (+105°C~+110°C) Derating of rated voltage (1.25%/°C~0.62%/°C)	Jul. 9 2012
△	Addition Capacitance (104~394, 275~475)	Nov. 22 2012
△	Company name changed	Apr. 1 2013
△	Company name changed	Apr. 1 2015
△	Company name changed	Apr. 1 2022

SPECIFICATIONS No.

ITEM CODE NUMBER STRUCTURE



MARKING EXAMPLE



PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
△ 0.1 ~ 0.39	5000
0.47 ~ 0.56	3000
0.68	2800
0.82	2600
1.0 ~ 1.2	2000
1.5	1600
1.8	1400
△ 2.2 ~ 2.7	1200
△ 3.3 ~ 3.9	1000
△ 4.7	600

QUANTITY of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
△ 0.47 ~ 3.9	1000
△ 4.7	600

CONSTRUCTION

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

MARKING

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

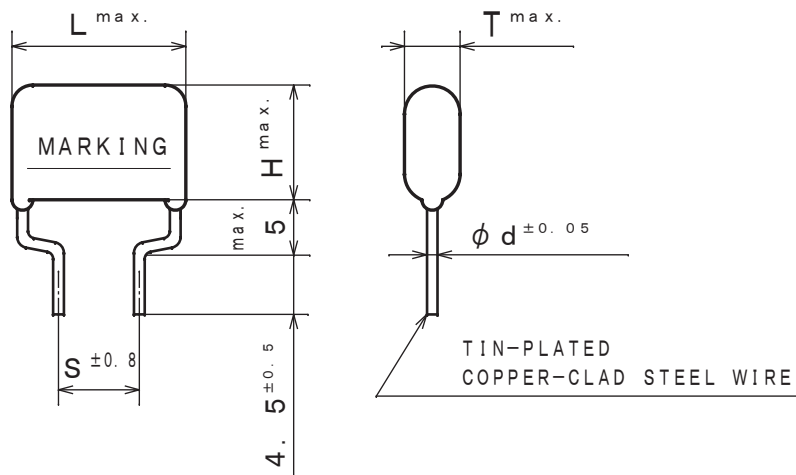
PROPERTIES

- \*Capacitance : See table at 1kHz.
- \*Capacitance tolerance : ±5% (J), ±10% (K) at 1kHz.
- \*Rated voltage : 450VDC  
△ (Derating of rated voltage by 0.62%/°C at more than 85°C)
- \*Withstand voltage (terminal-terminal) : 450VDC×150% for 60s  
△ ≥30000MΩ (C≤0.33μF) at 100VDC, 20°C for 60s  
△ ≥10000MΩ·μF (C>0.33μF) at 100VDC, 20°C for 60s
- \*Insulation resistance : ≤0.1% at 1kHz, 20°C
- \*Dissipation factor : △ From -40°C to +110°C  
(including temperature rise on unit surface)
- \*Category temperature range

DESIGN	M. MEKADA
CHECKED	H. YAMADA
APPROVAL	T. KATO
ESTABLISHMENT	Mar. 19, 2012
TYPE NAME ECWFD2W*** () Q	
NAME Metallized Polypropylene Film Capacitor	
DRAWING NAME PRODUCT DRAWING	
DRAWING No. B022J-J-E (1/1)	

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

THIRD ANGLE PROJECTION



PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
0.47	5000
0.68	2800
1.0	2000

QUANTITY of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
0.47~1.0	1000

ALTERATION

ISSUE	DESCRIPTION	DATE
1	Addition Capacitance (684, 105)	Oct. 10 2013
2	Company name changed	Apr. 1 2015
3	Error correction (Delete Tol. in table)	Nov. 8 2016
4	Company name changed	Apr. 1 2022

SPECIFICATIONS No.

(example)

WFD 2W

474 J

date code



ITEM CODE	RATED VOLTAGE	CAP. (μF)	DIMENSIONS					VOLUME (mm <sup>3</sup> )
			L	T	H	S	d	
ECWFD 2W474**	450VDC	0.47	12.6	6.5	11.2	7.5	0.6	806
" 2W684**	"	0.68	"	7.7	12.4	"	"	1040
" 2W105**	"	1.0	"	9.2	13.9	"	"	1386

PB=±5% (J)  
QB=±10% (K)

CONSTRUCTION

The capacitor is of non-inductive construction, wound with metallized polypropylene film dielectric.

The capacitor is enclosed in 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 0.62%/°C at more than 85°C)
- \*Withstand voltage (terminal-terminal) : 450VDC×150% for 60s
- \*Insulation resistance : ≥10000MΩ·μF at 100VDC, 20°C for 60s
- \*Dissipation factor : ≤0.1% at 1kHz, 20°C
- \*Category temperature range : From -40°C to +110°C  
(including temperature rise on unit surface)

DESIGN	M. MEKADA
CHECKED	H. YOSHIDA
APPROVAL	T. KATO

ESTABLISHMENT Jun. 4. 2013

TYPE NAME  
ECWFD 2W\*\*\*PB  
ECWFD 2W\*\*\*QB

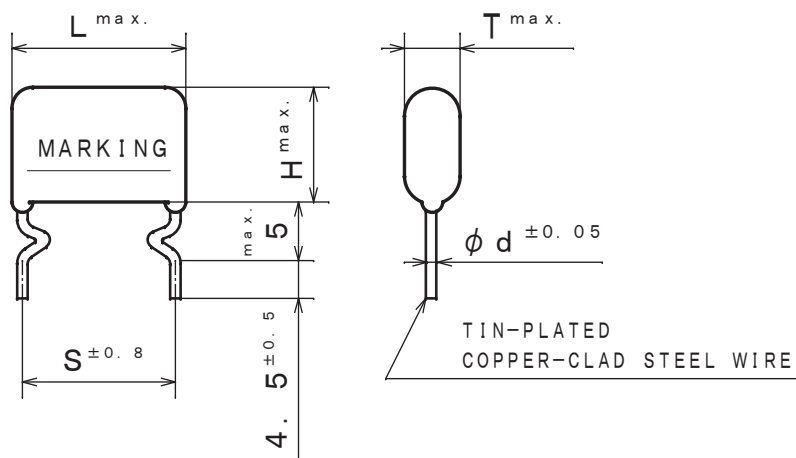
NAME Metallized Polypropylene  
Film Capacitor

DRAWING NAME  
PRODUCT DRAWING

DRAWING No.  
B090J-J-E (1/1)

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

THIRD ANGLE PROJECTION



PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
0.47	5000
0.68	2800
1.0	2000

QUANTITY of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
0.47~1.0	1000

ALTERATION

ISSUE	DESCRIPTION	DATE
1	Addition Capacitance (684, 105)	Oct. 10 2013
2	Company name changed	Apr. 1 2015
3	Error correction (Delete Tol. in table)	Nov. 8 2016
4	Company name changed	Apr. 1 2022

SPECIFICATIONS No.

(example)

WFD 2W

474 J

date code

ITEM CODE	RATED VOLTAGE	CAP. (μF)	DIMENSIONS					VOLUME (mm <sup>3</sup> )
			L	T	H	S	d	
ECWFD 2W474**	450VDC	0.47	12.6	6.5	11.2	10.0	0.6	806
" 2W684**	"	0.68	"	7.7	12.4	"	"	1040
" 2W105**	"	1.0	"	9.2	13.9	"	"	1386

PQ=±5% (J)  
QQ=±10% (K)

CONSTRUCTION

The capacitor is of non-inductive construction, wound with metallized polypropylene film dielectric.

The capacitor is enclosed in 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 0.62%/°C at more than 85°C)
- \*Withstand voltage (terminal-terminal) : 450VDC×150% for 60s
- \*Insulation resistance : ≥10000MΩ·μF at 100VDC, 20°C for 60s
- \*Dissipation factor : ≤0.1% at 1kHz, 20°C
- \*Category temperature range : From -40°C to +110°C  
(including temperature rise on unit surface)

DESIGN	M. MEKADA
CHECKED	H. INASHITA
APPROVAL	T. KATO
ESTABLISHMENT	Jun. 4. 2013
TYPE NAME	ECWFD 2W***PQ ECWFD 2W***QQ
NAME	Metallized Polypropylene Film Capacitor
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	B091J-J-E (1/1)

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