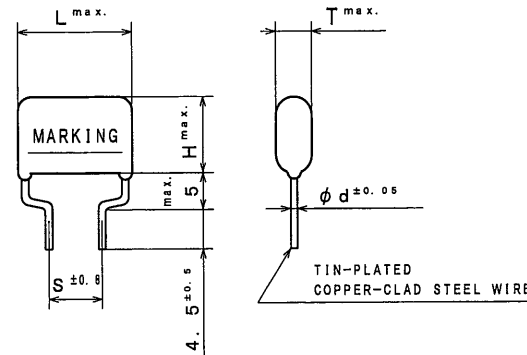
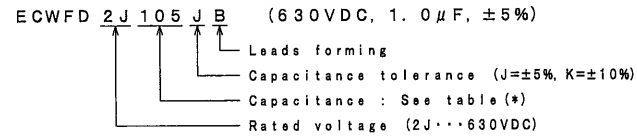


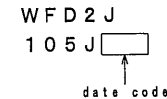
THIRD ANGLE PROJECTION

ITEM CODE	CAPACITANCE μF (*)	DIMENSIONS					VOLUME (mm ³)
		L	T	H	S	d	
ECWFD2J103 () B	0.01 (103)	12.6	4.9	8.0	7.5	0.6	430
" 2J123 () B	0.012 (123)	"	5.2	8.2	"	"	468
" 2J153 () B	0.015 (153)	"	5.6	8.6	"	"	524
" 2J183 () B	0.018 (183)	"	5.9	9.0	"	"	579
" 2J223 () B	0.022 (223)	"	6.4	9.4	"	"	651
" 2J273 () B	0.027 (273)	"	6.9	9.9	"	"	739
" 2J333 () B	0.033 (333)	"	7.5	10.5	"	"	842
" 2J393 () B	0.039 (393)	"	8.0	11.0	"	"	944
" 2J473 () B	0.047 (473)	"	4.4	7.8	"	"	386
" 2J563 () B	0.056 (563)	"	4.7	8.1	"	"	420
" 2J683 () B	0.068 (683)	"	5.0	8.4	"	"	465
" 2J823 () B	0.082 (823)	"	5.4	8.7	"	"	516
" 2J104 () B	0.1 (104)	"	5.8	9.2	"	"	580
" 2J124 () B	0.12 (124)	"	6.2	9.6	"	"	649
" 2J154 () B	0.15 (154)	"	6.8	10.2	"	"	752
" 2J184 () B	0.18 (184)	"	7.4	10.7	"	"	853
" 2J224 () B	0.22 (224)	"	8.1	11.4	"	"	985
" 2J274 () B	0.27 (274)	17.8	6.0	11.0	"	0.8	1042
" 2J334 () B	0.33 (334)	"	6.6	11.5	"	"	1189
" 2J394 () B	0.39 (394)	"	7.1	12.0	"	"	1334
" 2J474 () B	0.47 (474)	"	7.8	12.7	"	"	1524
" 2J564 () B	0.56 (564)	"	8.4	13.3	"	"	1736
" 2J684 () B	0.68 (684)	"	9.3	14.2	"	"	2014
" 2J824 () B	0.82 (824)	"	10.2	15.1	"	"	2335
" 2J105 () B	1.0 (105)	25.3	8.4	13.5	15.0	"	2498
" 2J125 () B	1.2 (125)	"	9.2	14.3	"	"	2868
" 2J155 () B	1.5 (155)	"	10.3	15.5	"	"	3467
" 2J185 () B	1.8 (185)	"	11.2	16.5	"	"	4011
" 2J225 () B	2.2 (225)	"	12.4	17.7	"	"	4728
" 2J275 () B	2.7 (275)	"	13.8	19.2	"	"	5681
" 2J335 () B	3.3 (335)	"	15.3	20.7	"	"	6737
" 2J395 () B	3.9 (395)	"	16.6	22.1	"	"	7782
" 2J475 () B	4.7 (475)	"	18.3	23.9	"	"	9255

ITEM CODE NUMBER STRUCTURE



MARKING EXAMPLE



QUANTITY of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
△ 0.01 ~ 1.5	1000
1.8	900
2.2	800
2.7	700
3.3	600
3.9	500
4.7	400

ALTERATION		
ISSUE	DESCRIPTION	DATE
△	Addition Capacitance (103~393)	Apr. 16 2018

SPECIFICATIONS No.

PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
△ 0.01 ~ 0.22	5000
0.27 ~ 0.33	2600
0.39 ~ 0.47	2200
0.56 ~ 0.68	1600
0.82 ~ 1.2	1200
1.5	1000
1.8	900
2.2	800
2.7	700
3.3	600
3.9	500
4.7	400

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, type name "WFD" and manufacturer's date code.

PROPERTIES

Capacitance : See table at 1kHz
Capacitance tolerance : ±5% (J), ±10% (K) at 1kHz.
Rated voltage : 630VDC (Derating of rated voltage by 1.0%/°C at more than 85°C)
Withstand voltage : 630VDCx150% for 60s
Insulation resistance : ≥9000MΩ (C≤0.33μF) at 500VDC, 20°C for 60s
: ≥3000MΩ·μF (C>0.33μF) at 500VDC, 20°C for 60s
Dissipation factor : ≤0.1% at 1kHz, 20°C
Category temperature range : From -40°C to +105°C (including temperature rise on unit surface)

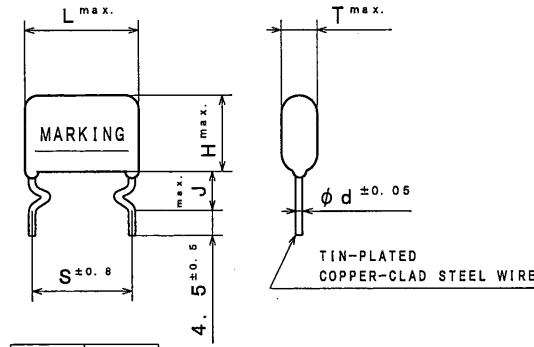
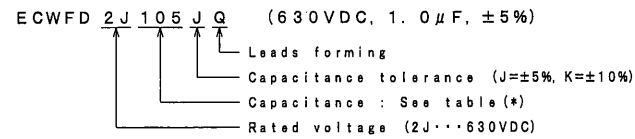
DESIGN	Reference
CHECKED	
APPROVAL	
ESTABLISHMENT	Jan. 18, 2017
TYPE NAME	ECWFD2J*** () B
NAME	Metallized Polypropylene Film Capacitor
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	G003J-J-E (1/1)

Toyama-Matsue Plant
Device Solutions Business Division
Panasonic Corporation

THIRD ANGLE PROJECTION

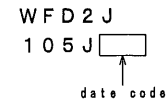
ITEM CODE	CAPACITANCE		DIMENSIONS					VOLUME (mm ³)
	μF	(*)	L	T	H	S	d	
ECWFD2J103 () Q	0.01	(103)	12.6	4.9	8.0	10.0	0.6	430
" 2J123 () Q	0.012	(123)	"	5.2	8.2	"	"	468
" 2J153 () Q	0.015	(153)	"	5.6	8.6	"	"	524
" 2J183 () Q	0.018	(183)	"	5.9	9.0	"	"	579
" 2J223 () Q	0.022	(223)	"	6.4	9.4	"	"	651
" 2J273 () Q	0.027	(273)	"	6.9	9.9	"	"	739
" 2J333 () Q	0.033	(333)	"	7.5	10.5	"	"	842
" 2J393 () Q	0.039	(393)	"	8.0	11.0	"	"	944
" 2J473 () Q	0.047	(473)	"	4.4	7.8	"	"	386
" 2J563 () Q	0.056	(563)	"	4.7	8.1	"	"	420
" 2J683 () Q	0.068	(683)	"	5.0	8.4	"	"	465
" 2J823 () Q	0.082	(823)	"	5.4	8.7	"	"	516
" 2J104 () Q	0.1	(104)	"	5.8	9.2	"	"	580
" 2J124 () Q	0.12	(124)	"	6.2	9.6	"	"	649
" 2J154 () Q	0.15	(154)	"	6.8	10.2	"	"	752
" 2J184 () Q	0.18	(184)	"	7.4	10.7	"	"	853
" 2J224 () Q	0.22	(224)	"	8.1	11.4	"	"	985
" 2J274 () Q	0.27	(274)	17.8	6.0	11.0	15.0	0.8	1042
" 2J334 () Q	0.33	(334)	"	6.6	11.5	"	"	1189
" 2J394 () Q	0.39	(394)	"	7.1	12.0	"	"	1334
" 2J474 () Q	0.47	(474)	"	7.8	12.7	"	"	1524
" 2J564 () Q	0.56	(564)	"	8.4	13.3	"	"	1736
" 2J684 () Q	0.68	(684)	"	9.3	14.2	"	"	2014
" 2J824 () Q	0.82	(824)	"	10.2	15.1	"	"	2335
" 2J105 () Q	1.0	(105)	25.3	8.4	13.5	22.5	"	2498
" 2J125 () Q	1.2	(125)	"	9.2	14.3	"	"	2868
" 2J155 () Q	1.5	(155)	"	10.3	15.5	"	"	3467
" 2J185 () Q	1.8	(185)	"	11.2	16.5	"	"	4011
" 2J225 () Q	2.2	(225)	"	12.4	17.7	"	"	4728
" 2J275 () Q	2.7	(275)	"	13.8	19.2	"	"	5681
" 2J335 () Q	3.3	(335)	"	15.3	20.7	"	"	6737
" 2J395 () Q	3.9	(395)	"	16.6	22.1	"	"	7782
" 2J475 () Q	4.7	(475)	"	18.3	23.9	"	"	9255

ITEM CODE NUMBER STRUCTURE



φ d	J
0.6	5.0
0.8	7.0

MARKING EXAMPLE



QUANTITY of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
△ 0.01 ~ 1.5	1000
1.8	900
2.2	800
2.7	700
3.3	600
3.9	500
4.7	400

ALTERATION		
ISSUE	DESCRIPTION	DATE
△	Addition Capacitance (103~393)	Apr. 16 2019
SPECIFICATIONS No.		

PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
△ 0.01 ~ 0.22	5000
0.27 ~ 0.33	2600
0.39 ~ 0.47	2200
0.56 ~ 0.68	1600
0.82 ~ 1.2	1200
1.5	1000
1.8	900
2.2	800
2.7	700
3.3	600
3.9	500
4.7	400

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, type name "WFD" and manufacturer's date code.

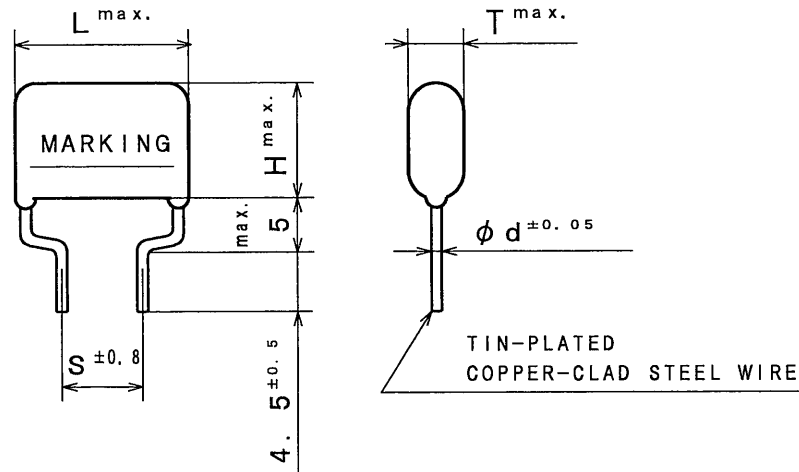
PROPERTIES

Capacitance : See table at 1kHz
 Capacitance tolerance : ±5%(J), ±10%(K) at 1kHz.
 Rated voltage : 630VDC (Derating of rated voltage by 1.0%/°C at more than 85°C)
 Withstand voltage : 630VDCx150% for 60s
 Insulation resistance : ≥9000MΩ (C≤0.33μF) at 500VDC, 20°C for 60s
 : ≥3000MΩ·μF (C>0.33μF) at 500VDC, 20°C for 60s
 Dissipation factor : ≤0.1% at 1kHz, 20°C
 Category temperature range : From -40°C to +105°C
 (including temperature rise on unit surface)

DESIGN	<i>K. Murakami</i>
CHECKED	<i>K. Usuki</i>
APPROVAL	<i>K. Takemoto</i>
ESTABLISHMENT	Jan. 18, 2017
TYPE NAME	ECWFD2J*** () Q
NAME	Metallized Polypropylene Film Capacitor
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	G004J-J-E (1/1)

Toyama-Matsue Plant
 Device Solutions Business Division
 Panasonic Corporation

THIRD ANGLE PROJECTION



PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
1.0	1200

QUANTITY of MINIMUM ORDER

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

ALTERATION

ISSUE	DESCRIPTION	DATE

SPECIFICATIONS No.

(example)
WFD 2 J
105 J
 date code

DESIGN	<i>Kikunuki Tsubushima</i>
CHECKED	<i>Reference</i>
APPROVAL	<i>M. Suenaga</i>
ESTABLISHMENT	Jan 18, 2017

TYPE NAME
 ECWFD 2J***PB
 ECWFD 2J***QB

NAME Metallized Polypropylene
 Film Capacitor

DRAWING NAME
 PRODUCT DRAWING

DRAWING No.
 G019J-J-E (1/1)

ITEM CODE	RATED VOLTAGE	CAP. (μF)	DIMENSIONS					VOLUME (mm ³)
			L	T	H	S	d	
ECWFD 2J105**	630VDC	1.0	17.8	11.2	16.1	7.5	0.8	2742

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

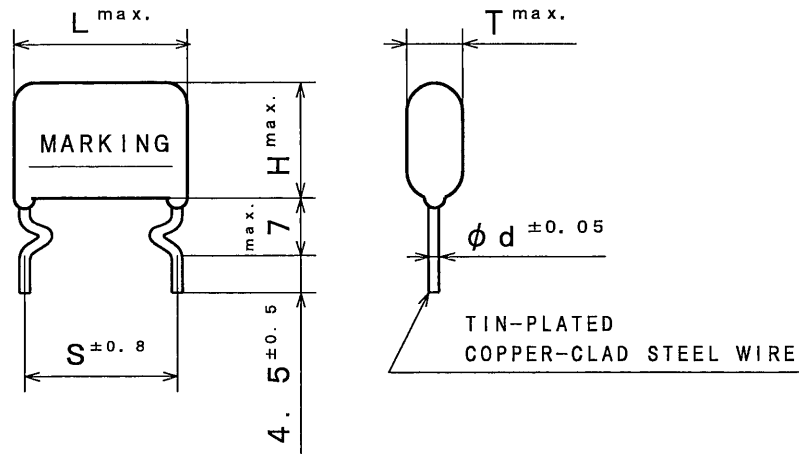
Marking comprises capacitance, capacitance tolerance, rated voltage and date code.

PROPERTIES

- *Capacitance : See table at 1kHz.
- *Capacitance tolerance : ±5% (J), ±10% (K) at 1kHz.
- *Rated voltage : 630VDC
 (Derating of rated voltage by 1.0%/°C at more than 85°C)
- *Withstand voltage (terminal-terminal) : 630VDCx150% for 60s
- *Insulation resistance : ≥3,000MΩ·μF at 500VDC, 20°C for 60s
- *Dissipation factor : ≤0.1% at 1kHz, 20°C
- *Category temperature range : From -40°C to +105°C
 (including temperature rise on unit surface)

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 Device Solutions Business Division
 Panasonic Corporation

THIRD ANGLE PROJECTION



PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
1.0	1200

QUANTITY of MINIMUM ORDER

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

ITEM CODE	RATED VOLTAGE	CAP. (μF)	DIMENSIONS					VOLUME (mm ³)
			L	T	H	S	d	
ECWFD 2J105**	630VDC	1.0	17.8	11.2	16.1	15.0	0.8	2742

PQ=±5% (J)
 QQ=±10% (K)

ALTERATION		
ISSUE	DESCRIPTION	DATE

SPECIFICATIONS No.

(example)

WFD 2 J

105 J

date code

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 : 630VDC
 (Derating of rated voltage by 1.0%/°C at more than 85°C)
- *Withstand voltage (terminal-terminal) : 630VDC×150% for 60s
- *Insulation resistance : ≥3,000Ω·μF at 500VDC, 20°C for 60s
- *Dissipation factor : ≤0.1% at 1kHz, 20°C
- *Category temperature range : From -40°C to +105°C
 (including temperature rise on unit surface)

DESIGN	<i>Kiyohiko Tsubushima</i>
CHECKED	<i>Tetsuo Tanaka</i>
APPROVAL	<i>M. Suwaga</i>
ESTABLISHMENT	Jan 18, 2017
TYPE NAME	
ECWFD 2J***PQ	
ECWFD 2J***QQ	
NAME Metallized Polypropylene Film Capacitor	
DRAWING NAME	
PRODUCT DRAWING	
DRAWING No.	
G020J-J-E (1/1)	

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 Panasonic Corporation