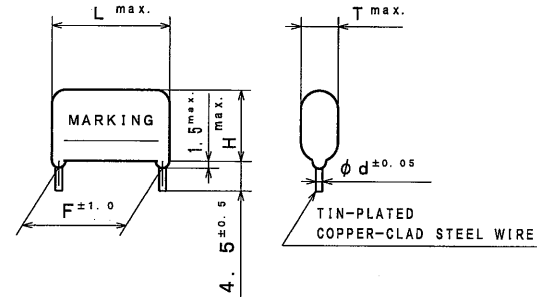


THIRD ANGLE PROJECTION

ITEM CODE	CAP. μF (*)	DIMENSIONS					VOLUME (mm <sup>3</sup> )
		L	T	H	F	d	
ECWHA3C472 () C	0.0047 (472)	17.8	6.4	9.1	15.0	0.6	830
" 3C512 () C	0.0051 (512)	"	6.6	9.4	"	"	887
" 3C562 () C	0.0056 (562)	"	6.8	9.6	"	"	932
" 3C622 () C	0.0062 (622)	"	7.1	9.8	"	"	993
" 3C682 () C	0.0068 (682)	"	6.1	12.1	"	"	1109
" 3C752 () C	0.0075 (752)	"	6.5	12.4	"	"	1207
" 3C822 () C	0.0082 (822)	"	6.8	12.7	"	"	1280
" 3C912 () C	0.0091 (912)	"	7.1	13.0	"	"	1356
" 3C103 () C	0.010 (103)	20.3	6.4	12.3	17.5	"	1345
" 3C113 () C	0.011 (113)	"	6.6	12.5	"	"	1407
" 3C123 () C	0.012 (123)	"	6.8	12.8	"	"	1491
" 3C133 () C	0.013 (133)	"	7.1	13.0	"	"	1578
" 3C153 () C	0.015 (153)	"	7.6	13.5	"	"	1736
" 3C163 () C	0.016 (163)	"	7.9	13.8	"	"	1829
" 3C183 () C	0.018 (183)	20.6	8.2	14.1	"	0.8	1998
" 3C203 () C	0.02 (203)	"	8.7	14.6	"	"	2175
" 3C223 () C	0.022 (223)	"	9.1	15.0	"	"	2320
" 3C243 () C	0.024 (243)	"	9.6	15.4	"	"	2510
" 3C273 () C	0.027 (273)	"	10.0	15.9	"	"	2707
" 3C303 () C	0.03 (303)	"	10.7	16.5	"	"	2989
" 3C333 () C	0.033 (333)	"	11.2	17.0	"	"	3203
" 3C363 () C	0.036 (363)	"	11.7	17.5	"	"	3425
" 3C393 () C	0.039 (393)	"	12.1	18.0	"	"	3654
" 3C433 () C	0.043 (433)	"	12.8	18.6	"	"	3979
" 3C473 () C	0.047 (473)	"	13.4	19.2	"	"	4277

TOL. SYMBOL (H or J)



F: regulation of the root

PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
0.0047 ~ 0.0062	3000
0.0068 ~ 0.0075	2600
0.0082 ~ 0.011	2200
0.012 ~ 0.013	2000
0.015 ~ 0.016	1600
0.018 ~ 0.02	1400
0.022 ~ 0.033	1200
0.036 ~ 0.043	1000
0.047	800

UNIT of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
0.0047 ~ 0.043	1000
0.047	800

ALTERATION		
ISSUE	DESCRIPTION	DATE
△	Company name changed Correction	Apr. 1 2012
△	Company name changed	Apr. 1 2013
△	Company name changed	Apr. 1 2015
SPECIFICATIONS No.		

MARKING EXAMPLE

W H A 3 C  
103H   
↑  
date code

Reference

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 "WHA" and manufacturer's date code.

PROPERTIES

- \*Capacitance : See table at 1kHz.
- \*Capacitance tolerance : ±3% (H), ±5% (J) at 1kHz.
- \*Rated voltage : 1600VDC
- \*Withstand voltage (terminal-terminal) : 1600VDC×150% for 60s
- \*Insulation resistance : ≥30000MΩ 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>M. Yanagimoto</i>
CHECKED	<i>M. Yanagimoto</i>
APPROVAL	<i>Y. Takata</i>
ESTABLISHMENT	Oct. 19, 2011
TYPE NAME	ECWHA3C*** () C
NAME	Metallized Polypropylene Film Capacitor
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	A018J-J-E (1/1)

Toyama-Matsue Plant  
Device Solutions Business Division  
Panasonic Corporation