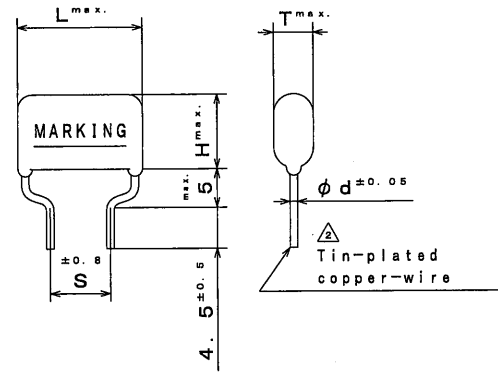
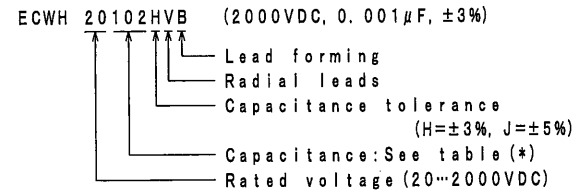


THIRD ANGLE PROJECTION

ITEM CODE	CAPACITANCE μF (*)	DIMENSIONS					
		L	T	H	S	d	
ECWH 20102 () VB	0.001 (102)	18.0	6.5	13.5	10.0	0.8	
" 20112 () VB	0.0011 (112)	"	"	"	"	"	
" 20122 () VB	0.0012 (122)	"	7.0	"	"	"	
" 20132 () VB	0.0013 (132)	"	"	14.0	"	"	
" 20152 () VB	0.0015 (152)	"	7.5	"	"	"	
" 20162 () VB	0.0016 (162)	"	"	14.5	"	"	
" 20182 () VB	0.0018 (182)	"	8.0	"	"	"	
" 20202 () VB	0.002 (202)	"	"	15.0	"	"	
" 20222 () VB	0.0022 (222)	"	8.5	"	"	"	
" 20242 () VB	0.0024 (242)	"	"	15.5	"	"	
" 20272 () VB	0.0027 (272)	"	9.0	16.0	"	"	
" 20302 () VB	0.003 (302)	"	9.5	"	"	"	
" 20332 () VB	0.0033 (332)	"	8.5	15.5	"	"	
" 20362 () VB	0.0036 (362)	"	9.0	"	"	"	
" 20392 () VB	0.0039 (392)	"	"	16.0	"	"	
" 20412 () VB	0.0041 (412)	"	"	"	"	"	
" 20432 () VB	0.0043 (432)	"	9.5	"	"	"	
" 20472 () VB	0.0047 (472)	23.0	7.0	15.5	15.0	"	
" 20512 () VB	0.0051 (512)	"	7.5	16.0	"	"	
" 20562 () VB	0.0056 (562)	"	"	"	"	"	
" 20622 () VB	0.0062 (622)	"	8.0	16.5	"	"	
" 20682 () VB	0.0068 (682)	"	8.5	"	"	"	
" 20722 () VB	0.0072 (722)	"	"	17.0	"	"	
" 20752 () VB	0.0075 (752)	"	9.5	18.0	"	"	
" 20822 () VB	0.0082 (822)	"	10.0	"	"	"	
" 20912 () VB	0.0091 (912)	"	"	19.0	"	"	
" 20103 () VB	0.01 (103)	"	10.5	19.5	"	"	
" 20113 () VB	0.011 (113)	"	11.0	20.0	"	"	
" 20123 () VB	0.012 (123)	"	11.5	20.5	"	"	
" 20133 () VB	0.013 (133)	"	12.0	21.0	"	"	
" 20153 () VB	0.015 (153)	"	"	21.5	"	"	



ITEM CODE NUMBER STRUCTURE



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

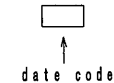
Marking comprises capacitance, capacitance tolerance, rated voltage, manufacturer's trademark and type name "WHV" and manufacturer's date code.

PROPERTIES

- Capacitance : See table at 1kHz
- Capacitance tolerance : ±3% (H), ±5% (J)
- Rated voltage : 2000VDC (Derating of rated voltage by 1.25%/°C at more than 85°C)
- Withstand voltage (terminal-terminal) : DC Rated voltage x 150% for 60s
- (terminal-enclosure) : 1500VAC for 60s
- Insulation resistance : 30,000MΩ or more, at 500VDC, 20°C for 60s
- Dissipation factor : 0.1% or less at 1kHz, 0.2% or less at 10kHz
- Category temperature range : From -40°C to +105°C (including temperature rise on unit surface)

(example)

WHV 102 H
M 2.0kVDC



ALTERATION		
ISSUE	DESCRIPTION	DATE
△	Modification	Oct. 1 2003
△	Addition (0.0041μF)	Feb. 20 2004
△	Company name changed	Oct. 1 2004
△	Company name changed	Apr. 1 2005
△	Company name changed	Apr. 1 2006
△	Alteration: Category temperature range (-25°C~+40°C)	Apr. 20 2007
△	Correction: category temperature range (-40°C~+85°C~+105°C) Addition: rated voltage (Derating of rated voltage by 1.25%/°C at more than 85°C) Company name changed	Apr. 1 2008
△	Company name changed	Apr. 1 2012
△	Company name changed	Apr. 1 2013
△	Company name changed	Apr. 1 2015

SPECIFICATIONS No.

Reference

DESIGN	<i>M. Imajima</i>
CHECKED	<i>M. Imajima</i>
APPROVAL	<i>T. Takata</i>
ESTABLISHMENT	Dec. 12. 1996
TYPE NAME	
ECWH 20*** () VB	
NAME METALLIZED POLYPROPYLENE CAPACITOR	
DRAWING NAME	
PRODUCT DRAWING	
DRAWING No.	
CH-H-612M (1/1)	

Toyama-Matsue Plant
Device Solutions Business Division
Panasonic Corporation

DO NOT SCALE DRAWING

REVISIONS INDICATED BY △

ALL DIMENSIONS ARE IN MILLIMETERS