

THIRD ANGLE PROJECTION

ITEM CODE	CAPACITANCE μF (*)	DIMENSIONS					TYPE
		L	W	H	e ₁ , e ₂	g	
ECHU 1H101 () X ()	0.0001 (101)	2.0±0.2	1.25±0.2	0.9±0.2	0.45±0.25	0.6 min.	J ₁
" 1H121 () X ()	0.00012 (121)	"	"	"	"	"	"
" 1H151 () X ()	0.00015 (151)	"	"	"	"	"	"
" 1H181 () X ()	0.00018 (181)	"	"	"	"	"	"
" 1H221 () X ()	0.00022 (221)	"	"	"	"	"	"
" 1H271 () X ()	0.00027 (271)	"	"	"	"	"	"
" 1H331 () X ()	0.00033 (331)	"	"	"	"	"	"
" 1H391 () X ()	0.00039 (391)	"	"	"	"	"	"
" 1H471 () X ()	0.00047 (471)	"	"	"	"	"	"
" 1H561 () X ()	0.00056 (561)	"	"	"	"	"	"
" 1H681 () X ()	0.00068 (681)	"	"	"	"	"	"
" 1H821 () X ()	0.00082 (821)	"	"	"	"	"	"
" 1H102 () X ()	0.001 (102)	"	"	"	"	"	"
" 1H122 () X ()	0.0012 (122)	"	"	"	"	"	"
" 1H152 () X ()	0.0015 (152)	"	"	"	"	"	"
" 1H182 () X ()	0.0018 (182)	"	"	"	"	"	"
" 1H222 () X ()	0.0022 (222)	"	"	"	"	"	"
" 1H272 () X ()	0.0027 (272)	"	"	"	"	"	"
" 1H332 () X ()	0.0033 (332)	3.2±0.2	1.6 ±0.2	"	0.65±0.3	1.0 min.	H ₁
" 1H392 () X ()	0.0039 (392)	"	"	"	"	"	"
" 1H472 () X ()	0.0047 (472)	"	"	"	"	"	"
" 1H562 () X ()	0.0056 (562)	"	"	"	"	"	"
" 1H682 () X ()	0.0068 (682)	"	"	△	"	"	△
" 1H822 () X ()	0.0082 (822)	"	"	△	1.1±0.2	"	△ H ₂
" 1H103 () X ()	0.01 (103)	"	"	"	"	"	"
" 1H123 () X ()	0.012 (123)	"	2.5 ±0.2	"	"	"	G ₁
" 1H153 () X ()	0.015 (153)	"	"	"	"	"	"
" 1H183 () X ()	0.018 (183)	"	"	1.5 ±0.2	"	"	G ₂
" 1H223 () X ()	0.022 (223)	"	"	"	"	"	"
" 1H273 () X ()	0.027 (273)	"	"	"	"	"	"
" 1H333 () X ()	0.033 (333)	"	"	2.1±0.2	"	"	G ₃
" 1H393 () X ()	0.039 (393)	"	"	"	"	"	"

5: φ180mm Reel
7: φ330mm Reel

CONSTRUCTION

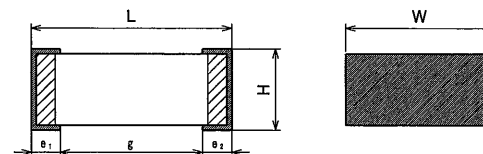
The capacitor is non-inductive construction, stacked with metallized plastic film dielectric, and has two outer electrodes.

PROPERTIES

Capacitance : See table at 1kHz
 Capacitance tolerance : ±2% (G), ±5% (J)
 Rated voltage : DC50V
 Withstand voltage : △ Rated voltage x 150% for 60s
 Insulation resistance : ≥3,000MΩ at 20°C, DC50V for 60s
 Dissipation factor : ≤0.6% at 1kHz, 20°C
 Category temperature : from -55°C to +125°C
 (including temperature rise on unit surface)

ITEM CODE NUMBER STRUCTURE

ECHU 1H102JX5 (DC50V, 0.001μF, ±5%)
 Packing Code (5=φ180mm Reel)
 (7=φ330mm Reel)
 Suffix
 Capacitance tolerance (G=±2%, J=±5%)
 Capacitance : See table (*)
 Rated voltage (1H=DC50V)



ALTERATION		
ISSUE	DESCRIPTION	DATE
△	Modification (Reusable reel)	Dec. 22 1999
△	Modification: (W=9.0%→9.0%)	Jan. 12 2001
△	Addition (Packing Code "7" φ330mm Reel)	Jul. 23 2002
△	Company name changed	Oct. 1 2004
△	Company name changed	Apr. 1 2005
△	Company name changed	Apr. 1 2006
△	Company name changed	Apr. 1 2008
△	Company name changed	Apr. 1 2012
△	Company name changed	Apr. 1 2013
△	Company name changed Error correction: Withstand voltage	Apr. 1 2015

SPECIFICATIONS No.

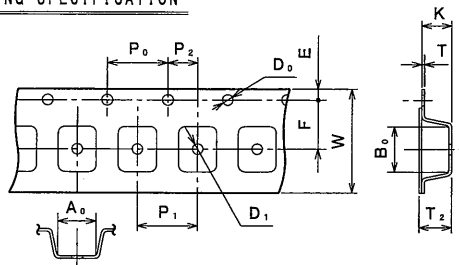
Reference

DESIGN	M. Mameda
CHECKED	M. Yamaguchi
APPROVAL	Y. Takata
ESTABLISHMENT	Oct. 21. 1999
TYPE NAME	ECHU 1H*** () X5 " 1H*** () X7
NAME	FILM CHIP CAPACITOR ECHU (X)
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	CW-H-A06H (1/2)

Toyama-Matsue Plant
 Device Solutions Business Division
 Panasonic Corporation

THIRD ANGLE PROJECTION

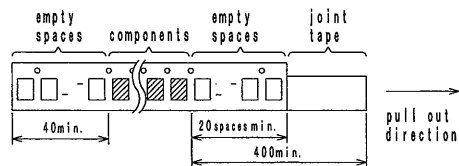
TAPING SPECIFICATION



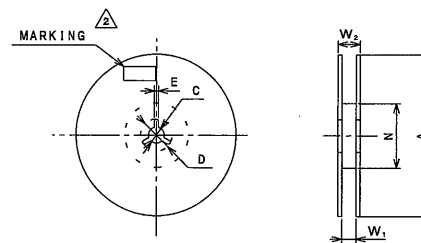
TYPE	A ₀	B ₀	T	T ₂	K
J ₁	1.55±0.1	2.3±0.1	0.25±0.05	1.3±0.2	1.2±0.1
H ₁ , H ₂	1.9 ±0.1	3.5±0.1	"	1.5±0.2	1.4±0.1
G ₁ , G ₂	2.8 ±0.1	"	"	1.9±0.2	1.8±0.1
G ₃	"	"	"	2.5±0.2	2.4±0.1

SYMBOL	DIMENSIONS
W	8.0 ±0.3
F	3.5 ±0.05
E	1.75±0.1
P ₁	4.0 ±0.1
P ₂	2.0 ±0.05
P ₀	4.0 ±0.1
φD ₀	1.5 ^{+0.1} / ₀
φD ₁	1.0 ^{+0.2} / ₀

EMPTY SPACE AND JOINT TAPE



PACKING SPECIFICATION



PACKING CODE	PACKING
5	φ180mm Reel 8mm Tape Width 4mm Pitch Plastic Taping
7	φ330mm Reel 8mm Tape Width 4mm Pitch Plastic Taping

DIMENSIONS

SYMBOL	PACKING CODE "5"	PACKING CODE "7"
A	180.0 ^{-1.5} / ₀	330.0 ±2.0
C	13.0 ±0.2	13.0 ±0.2
D	21.0 ±0.8	21.0 ±0.8
E	2.0 ±0.5	2.0 ±0.5
N	60.0 ^{+1.0} / ₀	80.0 ±1.0
W ₁	9.0 ^{+1.0} / ₀	9.4 ±1.0
W ₂	11.4 ±1.0	13.4 ±1.0

PACKING QUANTITY

PACKING CODE	TYPE	REEL (p.c.s.)
5	J ₁ , H ₁ , H ₂	3,000
	G ₁ , G ₂ , G ₃	2,000
7	J ₁ , H ₁ , H ₂	12,000
	G ₁ , G ₂	10,000
	G ₃	6,000

Reference

NAME	FILM CHIP CAPACITOR ECHU (X)
TYPE NAME	ECHU 1H*** () X5 " 1H*** () X7
DRAWING No.	CW-H-A06H (2/2)

Toyama·Matsue Plant
Device Solutions Business Division
Panasonic Corporation

DO NOT SCALE DRAWING

REVISIONS INDICATED BY A

ALL DIMENSIONS ARE IN MILLIMETERS