

THIRD ANGLE PROJECTION

ITEM CODE	CAPACITANCE		DIMENSIONS					TYPE
	μF	(*)	L	W	H	e_1, e_2	g	
ECHU 1C101 () X ()	0.0001	(101)	1.6±0.2	0.8±0.15	0.7±0.15	0.35±0.20	0.4min.	K ₁
" 1C121 () X ()	0.00012	(121)	"	"	"	"	"	"
" 1C151 () X ()	0.00015	(151)	"	"	"	"	"	"
" 1C181 () X ()	0.00018	(181)	"	"	"	"	"	"
" 1C221 () X ()	0.00022	(221)	"	"	"	"	"	"
" 1C271 () X ()	0.00027	(271)	"	"	"	"	"	"
" 1C331 () X ()	0.00033	(331)	"	"	"	"	"	"
" 1C391 () X ()	0.00039	(391)	"	"	"	"	"	"
" 1C471 () X ()	0.00047	(471)	"	"	"	"	"	"
" 1C561 () X ()	0.00056	(561)	"	"	"	"	"	"
" 1C681 () X ()	0.00068	(681)	"	"	"	"	"	"
" 1C821 () X ()	0.00082	(821)	"	"	"	"	"	"
" 1C102 () X ()	0.001	(102)	"	"	"	"	"	"
" 1C122 () X ()	0.0012	(122)	"	"	"	"	"	"
" 1C152 () X ()	0.0015	(152)	"	"	"	"	"	"
" 1C182 () X ()	0.0018	(182)	"	"	"	"	"	"
" 1C222 () X ()	0.0022	(222)	"	"	"	"	"	"
" 1C272 () X ()	0.0027	(272)	"	"	"	"	"	"
" 1C332 () X ()	0.0033	(332)	2.0±0.2	1.25±0.2	0.9±0.2	0.45±0.25	0.6min.	J ₁
" 1C392 () X ()	0.0039	(392)	"	"	"	"	"	"
" 1C472 () X ()	0.0047	(472)	"	"	"	"	"	"
" 1C562 () X ()	0.0056	(562)	"	"	"	"	"	"
" 1C682 () X ()	0.0068	(682)	"	"	"	"	"	"
" 1C822 () X ()	0.0082	(822)	"	"	1.1±0.2	"	"	J ₂
" 1C103 () X ()	0.01	(103)	"	"	"	"	"	"
" 1C123 () X ()	0.012	(123)	3.2±0.2	1.6±0.2	0.9±0.2	0.65±0.30	1.0min.	H ₁
" 1C153 () X ()	0.015	(153)	"	"	"	"	"	"
" 1C183 () X ()	0.018	(183)	"	"	"	"	"	"
" 1C223 () X ()	0.022	(223)	"	"	"	"	"	"
" 1C273 () X ()	0.027	(273)	"	"	1.1±0.2	"	"	H ₂
" 1C333 () X ()	0.033	(333)	"	"	"	"	"	"
" 1C393 () X ()	0.039	(393)	"	"	1.5±0.2	"	"	H ₃
" 1C473 () X ()	0.047	(473)	"	"	"	"	"	"
" 1C563 () X ()	0.056	(563)	"	2.5±0.2	"	"	"	G ₂
" 1C683 () X ()	0.068	(683)	"	"	"	"	"	"
" 1C823 () X ()	0.082	(823)	"	"	2.1±0.2	"	"	G ₃
" 1C104 () X ()	0.1	(104)	"	"	"	"	"	"

5: ϕ 180mm Reel
7: ϕ 330mm Reel

CONSTRUCTION

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

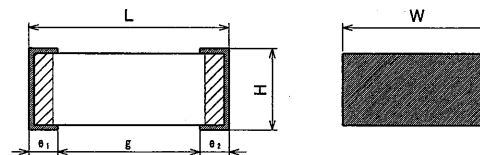
PROPERTIES

- Capacitance : See table at 1kHz
- Capacitance tolerance : $\pm 2\%$ (G), $\pm 5\%$ (J)
- Rated voltage : DC16V
- Withstand voltage : Δ Rated voltage x 150% for 60s
- Insulation resistance : $\geq 3,000M\Omega$ at 20°C, DC10V for 60s
- Dissipation factor : $\leq 0.6\%$ at 1kHz, 20°C
- Category temperature : from -55°C to +125°C (including temperature rise on unit surface)

ITEM CODE NUMBER STRUCTURE

ECHU 1C104JX5 (DC16V, 0.1 μF , $\pm 5\%$)

- ↑ Packing Code (5= ϕ 180mm Reel)
- ↑ (7= ϕ 330mm Reel)
- ↑ Suffix
- ↑ Capacitance tolerance (G= $\pm 2\%$, J= $\pm 5\%$)
- ↑ Capacitance : See table (*)
- ↑ Rated voltage (1C=DC16V)



ALTERATION		
ISSUE	DESCRIPTION	DATE
Δ	Addition (ECHU1C101~272) Addition (Packing Code '7' ϕ 330mm Reel)	Jun. 19 2002
Δ	Company name changed	Oct. 1 2004
Δ	Company name changed	Apr. 1 2005
Δ	Company name changed Clerical error correction: Taping Dimension (K, Type) (T ₁ : 1.1±0.2~1.0±0.2 (K: 1.0±0.1~0.9±0.1))	Apr. 1 2006
Δ	Company name changed	Apr. 1 2008
Δ	Company name changed	Apr. 1 2012
Δ	Company name changed	Apr. 1 2013
Δ	Company name changed Error correction: Withstand voltage	Apr. 1 2015
SPECIFICATIONS No.		

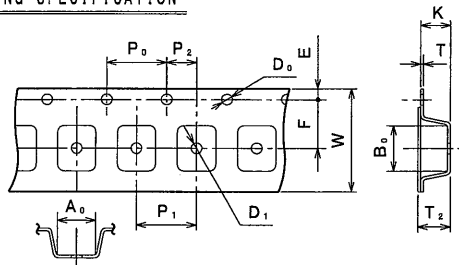
Reference

DESIGN	M. Mekada M. Mekada
CHECKED	M. Yamagimoto M. Yamagimoto
APPROVAL	Y. Takata Y. Takata
ESTABLISHMENT	Feb. 2, 1998
TYPE NAME	ECHU 1C*** () X5 " 1C*** () X7
NAME	FILM CHIP CAPACITOR ECHU (X)
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	CW-H-802H (1/2)

Toyama-Matsue Plant
Device Solutions Business Division
Panasonic Corporation

THIRD ANGLE PROJECTION

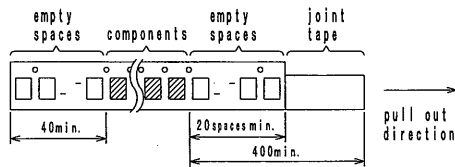
TAPING SPECIFICATION



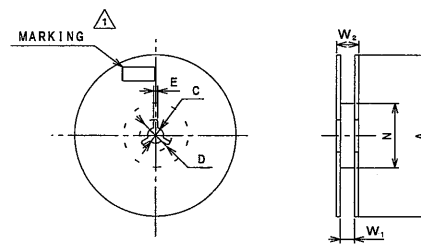
TYPE	A ₀	B ₀	T	T ₂	K
△ K ₁	1.0 ± 0.1	1.85 ± 0.1	0.20 ± 0.05	△ 1.0 ± 0.2	△ 0.9 ± 0.1
J ₁	1.55 ± 0.1	2.3 ± 0.1	0.25 ± 0.05	1.3 ± 0.2	1.2 ± 0.1
J ₂	#	#	#	1.5 ± 0.2	1.4 ± 0.1
H ₁ , H ₂	1.9 ± 0.1	△ 3.5 ± 0.1	#	#	#
H ₃	#	#	#	1.9 ± 0.2	1.8 ± 0.1
G ₂	2.8 ± 0.1	#	#	#	#
G ₃	#	△ #	#	2.5 ± 0.2	2.4 ± 0.1

SYMBOL	DIMENSIONS	
	△ K ₁	J ₁ , J ₂ , H ₁ , H ₂ , H ₃ , G ₂ , G ₃
W	8.0 ± 0.3	8.0 ± 0.3
F	3.5 ± 0.05	3.5 ± 0.05
E	1.75 ± 0.1	1.75 ± 0.1
P ₁		4.0 ± 0.1
P ₂	2.0 ± 0.05	2.0 ± 0.05
P ₀	4.0 ± 0.1	4.0 ± 0.1
φ D ₀	1.5 ^{+0.1}	1.5 ^{+0.1}
φ D ₁		1.0 ^{+0.2}

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 ^{-0.5}	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}	80.0 ± 1.0
W ₁	△ 9.0 ^{+1.0}	9.4 ± 1.0
W ₂	11.4 ± 1.0	13.4 ± 1.0

PACKING QUANTITY

PACKING CODE	TYPE	REEL (p.c.s.)
5	K ₁	4,000
	J ₁ , J ₂ , H ₁ , H ₂	3,000
	H ₃ , G ₂ , G ₃	2,000
7	K ₁	20,000
	J ₁ , J ₂ , H ₁ , H ₂	12,000
	H ₃ , G ₂	10,000
	G ₃	6,000

Reference

NAME	FILM CHIP CAPACITOR ECHU (X)
TYPE NAME	ECHU 1C*** () X5 " 1C*** () X7
DRAWING No.	CW-H-802H (2/2)

Toyama-Matsue Plant
Device Solutions Business Division
Panasonic Corporation

DO NOT SCALE DRAWING

REVISIONS INDICATED BY △

ALL DIMENSIONS ARE IN MILLIMETERS