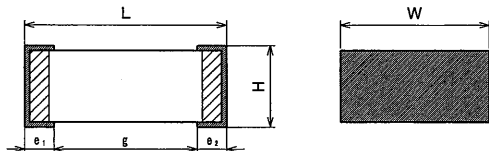
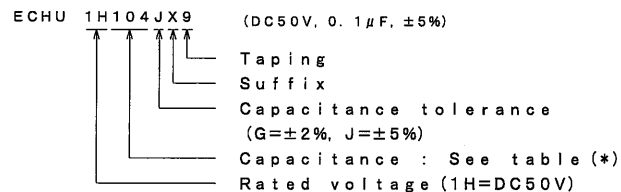


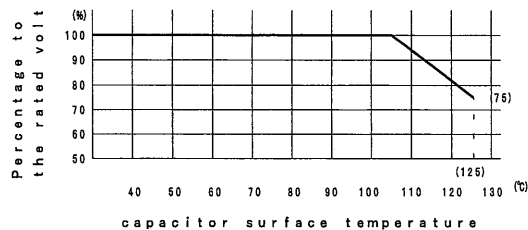
THIRD ANGLE PROJECTION

ITEM CODE	CAPACITANCE μF (#)	DIMENSIONS						TYPE
		L	W	H	e ₁ , e ₂	g		
ECHU 1H473 () X9	0.047 (473)	4.8±0.2	3.3±0.3	1.5±0.2	0.80±0.3	2.0min.	E ₁	
" 1H563 () X9	0.056 (563)	"	"	"	"	"	"	
" 1H683 () X9	0.068 (683)	"	"	"	"	"	"	
" 1H823 () X9	0.082 (823)	"	"	2.1±0.2	"	"	E ₂	
" 1H104 () X9	0.1 (104)	"	"	"	"	"	"	
" 1H124 () X9	0.12 (124)	6.0±0.2	4.1±0.3	1.9±0.2	"	"	D ₁	
" 1H154 () X9	0.15 (154)	"	"	"	"	"	"	
" 1H184 () X9	0.18 (184)	"	"	2.5±0.2	"	"	D ₂	
" 1H224 () X9	0.22 (224)	"	"	2.8±0.2	"	"	D ₄	

ITEM CODE NUMBER STRUCTURE



Derating of rated voltage to operating temperature
(including capacitor surface temperature)
[in the case of capacitance range exceeding 0.1μF (C > 0.1μF)]



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)

DO NOT SCALE DRAWING REVISIONS INDICATED BY Δ ALL DIMENSIONS ARE IN MILLIMETERS

ALTERATION

ISSUE	DESCRIPTION	DATE
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	Apr. 1 2015

SPECIFICATIONS No.

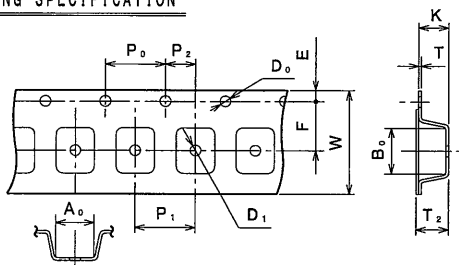
Reference

DESIGN	<i>M. Mekada</i> M. Mekada
CHECKED	<i>M. Yamagimoto</i> M. Yamagimoto
APPROVAL	<i>Y. Takata</i> Y. Takata
ESTABLISHMENT	Oct. 13. 2006
TYPE NAME	ECHU 1H*** () X9
NAME	FILM CHIP CAPACITOR ECHU (X)
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	6016C-J-E (1/2)

Toyama-Matsue Plant
Device Solutions Business Division
Panasonic Corporation

THIRD ANGLE PROJECTION

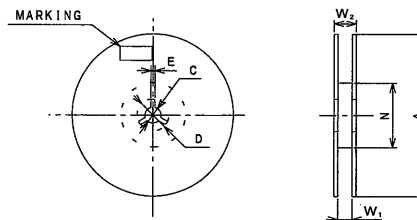
TAPING SPECIFICATION



TYPE	A_0	B_0	T	T_2	K
E_1	3.8 ± 0.1	5.1 ± 0.1	0.30 ± 0.05	2.0 ± 0.2	1.9 ± 0.1
E_2	#	#	#	2.6 ± 0.2	2.5 ± 0.1
D_1	4.6 ± 0.1	6.3 ± 0.1	#	2.7 ± 0.2	2.6 ± 0.1
D_3, D_4	#	#	#	3.5 ± 0.2	3.4 ± 0.1

SYMBOL	DIMENSIONS	
	E_1, E_2	D_1, D_3, D_4
W	12.0 ± 0.3	12.0 ± 0.3
F	5.5 ± 0.05	5.5 ± 0.05
E	1.75 ± 0.1	1.75 ± 0.1
P_1	8.0 ± 0.1	8.0 ± 0.1
P_2	2.0 ± 0.05	2.0 ± 0.05
P_0	4.0 ± 0.1	4.0 ± 0.1
ϕD_0	$1.5^{+0.1}_0$	$1.5^{+0.1}_0$
ϕD_1	$1.5^{+0.2}_0$	

PACKING SPECIFICATION

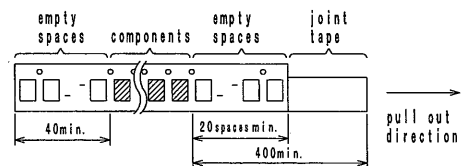


SYMBOL	DIMENSIONS
A	330.0 ± 2.0
C	13.0 ± 0.2
D	21.0 ± 0.8
E	2.0 ± 0.5
N	80.0 ± 1.0
W_1	13.4 ± 1.0
W_2	17.4 ± 1.0

PACKING QUANTITY

TYPE	REEL (pcs.)
E_1, E_2, D_1	3,000
D_3, D_4	2,000

EMPTY SPACE AND JOINT TAPE



Reference

NAME	FILM CHIP CAPACITOR ECHU (X)
TYPE NAME	ECHU 1H*** () X9
DRAWING No.	6016C-J-E (2/2)

Toyama-Matsue Plant
Device Solutions Business Division
Panasonic Corporation

DO NOT SCALE DRAWING

REVISIONS INDICATED BY Δ

ALL DIMENSIONS ARE IN MILLIMETERS