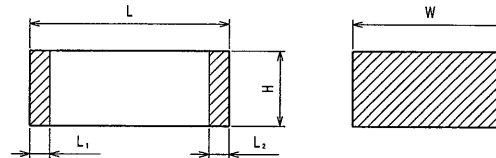
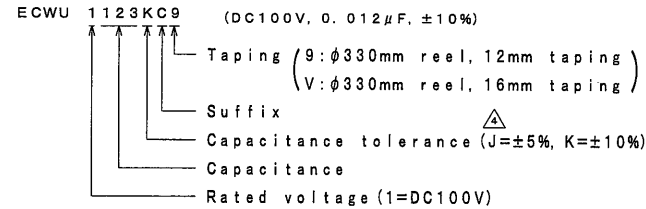


THIRD ANGLE PROJECTION

ITEM CODE	CAPACITANCE (μ F)	DIMENSIONS				TYPE
		L	W	H	L ₁ , L ₂	
ECWU1123 () C9	0.012	4.8 \pm 0.2	3.3 \pm 0.3	1.4 \pm 0.2	0.35 \pm 0.2	E ₁
" 1153 () C9	0.015	"	"	"	"	"
" 1183 () C9	0.018	"	"	"	"	"
" 1223 () C9	0.022	"	"	"	"	"
" 1273 () C9	0.027	"	"	"	"	"
" 1333 () C9	0.033	"	"	"	"	"
" 1393 () C9	0.039	"	"	"	"	"
" 1473 () C9	0.047	"	"	2.0 \pm 0.2	"	E ₂
" 1563 () C9	0.056	"	"	"	"	"
" 1683 () C9	0.068	"	"	2.4 \pm 0.2	"	E ₃
" 1823 () C9	0.082	"	"	2.8 \pm 0.2	"	E ₃
" 1104 () C9	0.1	6.0 \pm 0.2	4.1 \pm 0.3	1.8 \pm 0.2	"	D ₁
" 1124 () C9	0.12	"	"	2.4 \pm 0.2	"	D ₃
" 1154 () C9	0.15	"	"	2.8 \pm 0.2	"	D ₄
" 1184KC9	0.18	7.1 \pm 0.4	5.0 \pm 0.4	2.0 \pm 0.3	"	Z
" 1224KC9	0.22	"	"	2.4 \pm 0.3	"	"
" 1274KC9	0.27	"	"	2.9 \pm 0.3	"	"
" 1334KC9	0.33	"	"	3.5 \pm 0.3	"	"
" 1394KCV	0.39	7.7 \pm 0.4	5.5 \pm 0.4	3.4 \pm 0.3	"	X
" 1474KCV	0.47	"	"	4.0 \pm 0.3	"	"
" 1564KCV	0.56	9.8 \pm 0.5	6.3 \pm 0.4	3.0 \pm 0.3	"	V
" 1684KCV	0.68	"	"	3.6 \pm 0.3	"	"
" 1824KCV	0.82	"	"	4.3 \pm 0.3	"	"
" 1105KCV	1.0	"	"	5.1 \pm 0.3	"	"

ITEM CODE NUMBER STRUCTURE



ALTERATION		
ISSUE	DESCRIPTION	DATE
Δ	Alteration: Category temperature range (from -40°C to +85°C from -55°C to +125°C) Addition: Graph (Derating of rated voltage to operating temperature) Correction: Taping specification (TYPE X) A: 6.91 \pm 0.1-6.9 \pm 0.1 B: 8.43 \pm 0.1-8.4 \pm 0.1 T: 0.343 \pm 0.013-0.34 \pm 0.02 T: 5.685 \pm 0.2-5.7 \pm 0.2 K: 5.64 \pm 0.1-5.7 \pm 0.1 (TYPE V) A: 8.94 \pm 0.1-8.9 \pm 0.1 B: 10.54 \pm 0.1-10.5 \pm 0.1 T: 0.343 \pm 0.013-0.34 \pm 0.02 T: 5.795 \pm 0.2-5.9 \pm 0.2 K: 5.75 \pm 0.1-5.8 \pm 0.1	Jun. 21 2008
Δ	Correction: (ECWU1184~1334 () C9 →ECWU1184~1334KC9)	Jan. 8 2008
Δ	Company name changed	Apr. 1 2008
Δ	Error correction	Jun. 9 2011
Δ	Error correction Company name changed	Apr. 1 2012
Δ	Company name changed	Apr. 1 2013
Δ	Company name changed	Apr. 1 2015

SPECIFICATIONS No.

Capacitance	Tol.
0.012~0.15 μ F	\pm 10% (K), \pm 5 (J)
0.18 ~1.0 μ F	\pm 10% (K)

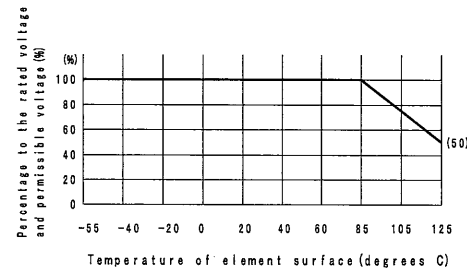
CONSTRUCTION

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 : Δ \pm 5% (J), \pm 10% (K)
 Rated voltage : DC100V
 Withstand voltage : Rated voltage \times 150% for 60s
 Insulation resistance : L: $R \geq 3,000\Omega$ when $C \leq 0.33\mu$ F } at 20°C, DC100V, for 60s
 : C: $R \geq 1,000\Omega \cdot F$ when $C > 0.33\mu$ F }
 Dissipation factor : $\leq 1.0\%$ at 1kHz, 20°C
 Category temperature range : Δ from -55°C to +125°C
 (including temperature rise on unit surface)

Derating of rated voltage to operating temperature

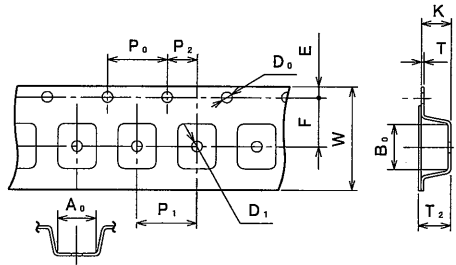


Reference

DESIGN	M. Mekada
CHECKED	M. Yamagimoto
APPROVAL	Y. Takata
ESTABLISHMENT	Aug. 28, 1996
TYPE NAME	ECWU 1***KC9 " 1*** () C9
NAME	FILM CHIP CAPACITOR ECWU (C)
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	CW-H-602H (1/2)

Toyama-Matsue Plant
 Device Solutions Business Division
 Panasonic Corporation

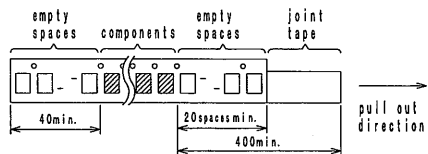
TAPING SPECIFICATION



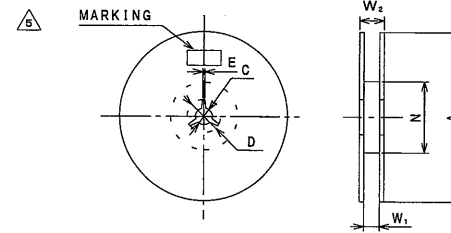
TYPE	A ₀	B ₀	T	T ₂	K
E ₁	3.8±0.1	5.1±0.1	0.30±0.05	2.0±0.2	1.9±0.1
E ₂	"	"	"	2.6±0.2	2.5±0.1
E _{3a} , E ₃	"	"	"	3.4±0.2	3.3±0.1
D ₁	4.6±0.1	6.3±0.1	"	2.7±0.2	2.6±0.1
D ₃ , D ₄	"	"	"	3.5±0.2	3.4±0.1
Z	5.5±0.1	7.5±0.1	"	4.7±0.2	4.6±0.1
X	6.9±0.1	8.4±0.1	0.34±0.02	5.7±0.2	5.7±0.1
V	8.9±0.1	10.5±0.1	"	5.9±0.2	5.8±0.1

SYMBOL	DIMENSIONS		
	E ₁ , E ₂ , E _{3a} , E ₃	D ₁ , D ₃ , D ₄ , Z	X, V
W	12.0 ±0.3	12.0 ±0.3	16.0 ^{+0.3} / _{-0.1}
F	5.5 ±0.05	5.5 ±0.05	7.5 ±0.1
E	1.75±0.1	1.75±0.1	1.75±0.1
P ₁	8.0 ±0.1	8.0 ±0.1	12.0 ±0.1
P ₂	2.0 ±0.05	2.0 ±0.05	2.0 ±0.1
P ₀	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1
φD ₀	1.5 ^{+0.1} / ₀	1.5 ^{+0.1} / ₀	1.5 ^{+0.1} / ₀
φD ₁	1.5 ^{+0.2} / ₀		1.5 ^{+0.25} / ₀

EMPTY SPACE AND JOINT TAPE



PACKING SPECIFICATION



SYMBOL	DIMENSIONS	
	E ₁ , E ₂ , E _{3a} , E ₃ , D ₁ , D ₃ , D ₄ , Z	X, V
A	330.0±2.0	330.0±0.2
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	80.0±1.0	80.0±1.0
W ₁	13.4±1.0	17.4±1.0
W ₂	17.4±1.0	24.4±1.0

PACKING QUANTITY

TYPE	REEL (pcs.)
E ₁ , E ₂ , D ₁	3,000
E _{3a} , E ₃ , D ₃ , D ₄	2,000
Z	1,500
X, V	1,000

Reference

NAME	FILM CHIP CAPACITOR ECWU (C)
TYPE NAME	ECWU 1***KCV " 1***()C9
DRAWING No.	CW-H-602H (2/2)

Toyama-Matsue Plant
Device Solutions Business Division
Panasonic Corporation