

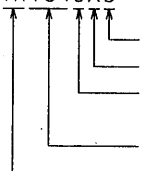
ALTERATION		
ISSUE	DESCRIPTION	DATE

SPECIFICATIONS No.

ITEM CODE	CAPACITANCE		DIMENSIONS					TYPE
	$\mu\text{F}$	(*)	L	W	H	$e_1, e_2$	g	
ECHU 1H473(X)9	0.047	(473)	4.8 $\pm$ 0.2	3.3 $\pm$ 0.3	1.5 $\pm$ 0.2	0.80 $\pm$ 0.3	2.0min.	E <sub>1</sub>
# 1H563(X)9	0.056	(563)	#	#	#	#	#	#
# 1H683(X)9	0.068	(683)	#	#	#	#	#	#
# 1H823(X)9	0.082	(823)	#	#	2.1 $\pm$ 0.2	#	#	E <sub>2</sub>
# 1H104(X)9	0.1	(104)	#	#	#	#	#	#
# 1H124(X)9	0.12	(124)	6.0 $\pm$ 0.2	4.1 $\pm$ 0.3	1.9 $\pm$ 0.2	#	#	D <sub>1</sub>
# 1H154(X)9	0.15	(154)	#	#	#	#	#	#
# 1H184(X)9	0.18	(184)	#	#	2.5 $\pm$ 0.2	#	#	D <sub>3</sub>
# 1H224(X)9	0.22	(224)	#	#	2.8 $\pm$ 0.2	#	#	D <sub>4</sub>

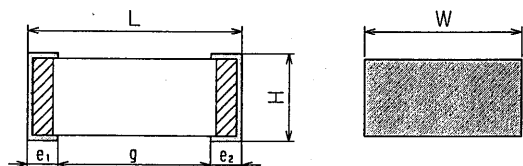
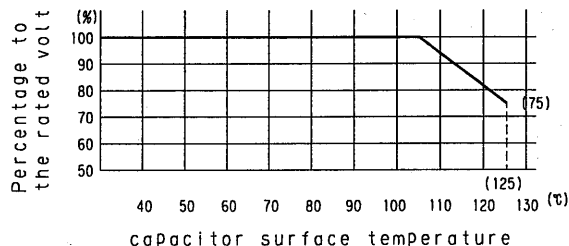
ITEM CODE NUMBER STRUCTURE

ECHU 1H104JX9 (DC50V, 0.1 $\mu\text{F}$ ,  $\pm$ 5%)



- Taping
- Suffix
- Capacitance tolerance (G= $\pm$ 2%, J= $\pm$ 5%)
- Capacitance : See table(\*)
- Rated voltage(1H=DC50V)

Derating of rated voltage to operating temperature (including capacitor surface temperature) [in the case of capacitance range exceeding 0.1 $\mu\text{F}$ (C > 0.1 $\mu\text{F}$ )]



CONSTRUCTION

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

PROPERTIES

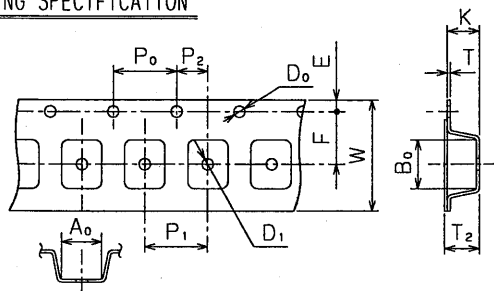
- Capacitance : See table at 1kHz
- Capacitance tolerance :  $\pm$ 2%(G),  $\pm$ 5%(J)
- Rated voltage : DC50V
- Withstand voltage : Rated voltage x 175% for 1s to 5s
- Insulation resistance :  $\geq$ 3,000M $\Omega$  at 20°C, DC50V for 60s
- Dissipation factor :  $\leq$ 0.6% at 1kHz, 20°C
- Category temperature : from -55°C to +125°C (including temperature rise on unit surface)

Reference

DESIGN	
CHECKED	
APPROVAL	
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)

Panasonic Electronic Devices Co.,Ltd.  
Capacitor Business Unit  
Panasonic Electronic Devices Matsue Co.,Ltd.

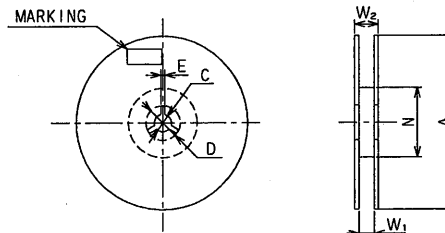
TAPING SPECIFICATION



TYPE	A <sub>0</sub>	B <sub>0</sub>	T	T <sub>2</sub>	K
E <sub>1</sub>	3.8 ±0.1	5.1 ±0.1	0.30 ±0.05	2.0 ±0.2	1.9 ±0.1
E <sub>2</sub>	#	#	#	2.6 ±0.2	2.5 ±0.1
D <sub>1</sub>	4.6 ±0.1	6.3 ±0.1	#	2.7 ±0.2	2.6 ±0.1
D <sub>3</sub> , D <sub>4</sub>	#	#	#	3.5 ±0.2	3.4 ±0.1

SYMBOL	DIMENSIONS	
	E <sub>1</sub> , E <sub>2</sub>	D <sub>1</sub> , D <sub>3</sub> , D <sub>4</sub>
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 <sub>1</sub>	8.0 ±0.1	8.0 ±0.1
P <sub>2</sub>	2.0 ±0.05	2.0 ±0.05
P <sub>0</sub>	4.0 ±0.1	4.0 ±0.1
∅D <sub>0</sub>	1.5 <sup>+0.1</sup> / <sub>0</sub>	1.5 <sup>+0.1</sup> / <sub>0</sub>
∅D <sub>1</sub>	1.5 <sup>+0.2</sup> / <sub>0</sub>	—

PACKING SPECIFICATION

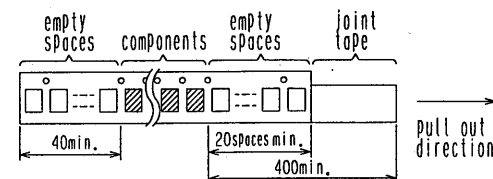


SYMBOL	DIMENSIONS
A	330.0 ±2.0
C	13.0 ±0.2
D	21.0 ±0.8
E	2.0 ±0.5
N	80.0 ±1.0
W <sub>1</sub>	13.4 ±1.0
W <sub>2</sub>	17.4 ±1.0

PACKING QUANTITY

TYPE	REEL (pcs.)
E <sub>1</sub> , E <sub>2</sub> , D <sub>1</sub>	3,000
D <sub>3</sub> , D <sub>4</sub>	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)

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