



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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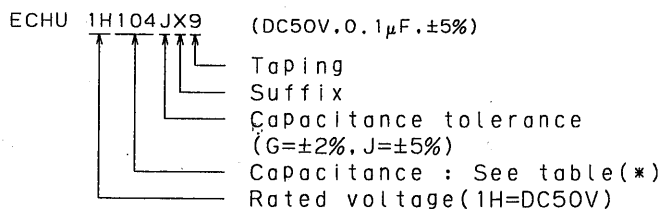
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



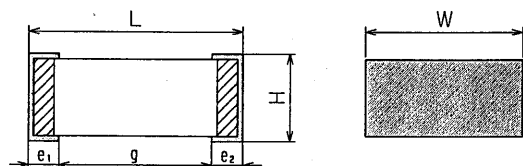
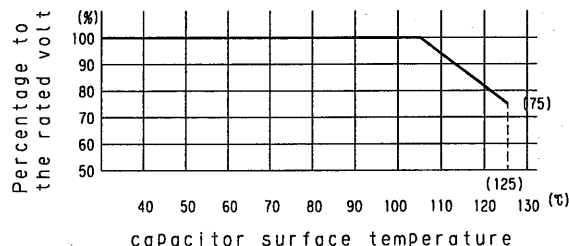
ALTERATION		
ISSUE	DESCRIPTION	DATE
SPECIFICATIONS No.		

ITEM CODE	CAPACITANCE μF (#)	DIMENSIONS					TYPE
		L	W	H	e ₁ , e ₂	g	
ECHU 1H473(X)9	0.047 (473)	4.8±0.2	3.3±0.3	1.5±0.2	0.80±0.3	2.0min.	E ₁
# 1H563(X)9	0.056 (563)	#	#	#	#	#	#
# 1H683(X)9	0.068 (683)	#	#	#	#	#	#
# 1H823(X)9	0.082 (823)	#	#	2.1±0.2	#	#	E ₂
# 1H104(X)9	0.1 (104)	#	#	#	#	#	#
# 1H124(X)9	0.12 (124)	6.0±0.2	4.1±0.3	1.9±0.2	#	#	D ₁
# 1H154(X)9	0.15 (154)	#	#	#	#	#	#
# 1H184(X)9	0.18 (184)	#	#	2.5±0.2	#	#	D ₃
# 1H224(X)9	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

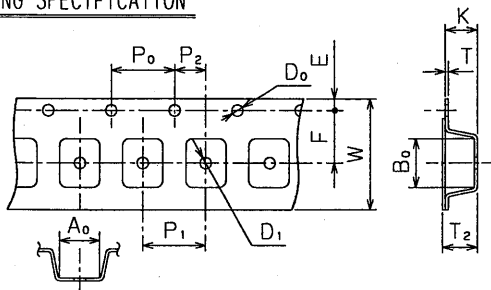
- Capacitance : See table at 1kHz
- Capacitance tolerance : ±2%(G), ±5%(J)
- Rated voltage : DC50V
- Withstand voltage : Rated voltage x 175% for 1s to 5s
- Insulation resistance : ≥3,000MΩ at 20°C, DC50V for 60s
- Dissipation factor : ≤0.6% at 1kHz, 20°C
- Category temperature : from -55°C to +125°C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

Reference

DESIGN	
CHECKED	
APPROVAL	
ESTABLISHMENT	Oct.13.2006
TYPE NAME	ECHU 1H*** (X)9
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.

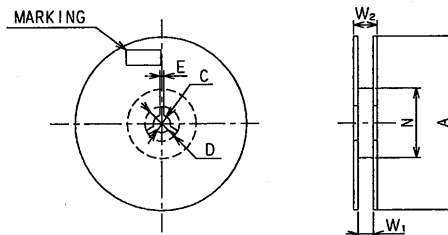
TAPING SPECIFICATION



TYPE	A 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
∅D ₀	1.5 ^{+0.1} ₀	1.5 ^{+0.1} ₀
∅D ₁	1.5 ^{+0.2} ₀	—

PACKING SPECIFICATION

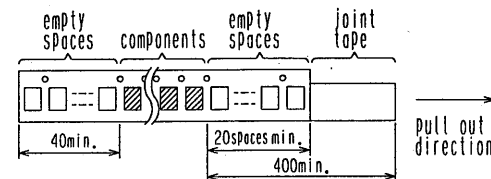


SYMBOL	DIMENSIONS
A	330.0 ±2.0
C	13.0 ±0.2
D	21.0 ±0.8
E	2.0 ±0.5
N	80.0 ±1.0
W ₁	13.4 ±1.0
W ₂	17.4 ±1.0

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)

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