

FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

Bulk Packing Quantity Unit

Components are packaged as per following packing unit.

Packing Quantity (Bulk)

Case Size ϕ DxL (mm)	Long lead		Cut lead	
	Inner bag (pcs)	Packing Unit (pcs / Carton box)	Inner bag (pcs)	Packing Unit (pcs / Carton box)
ϕ 4x5	200	8,000	200	8,000
ϕ 5x8, ϕ 5x10	200	3,200	200	4,000
ϕ 6.3x7	200	4,000	200	4,000
ϕ 6.3x8, ϕ 6.3x10	200	3,200	200	4,000
ϕ 8x6, ϕ 8x8, ϕ 8x9	200	3,200	200	4,000
ϕ 8x11.5	100	2,000	200	2,400
ϕ 10x12.5	100	1,600	100	2,000

Note: Please inquire for FPCAP by Packing Unit as above.

Cut lead (Bulk) Dimensions

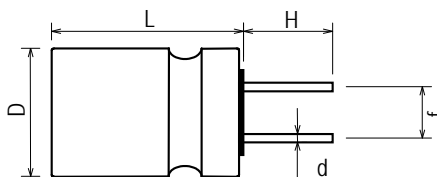
Lead Forming (Symbol: **CG**)

Nichicon P/N

: R□□□□□□ M□□1 **CG**

FPCAP P/N

: FP-□□□RE□□□M-□□ **CG**



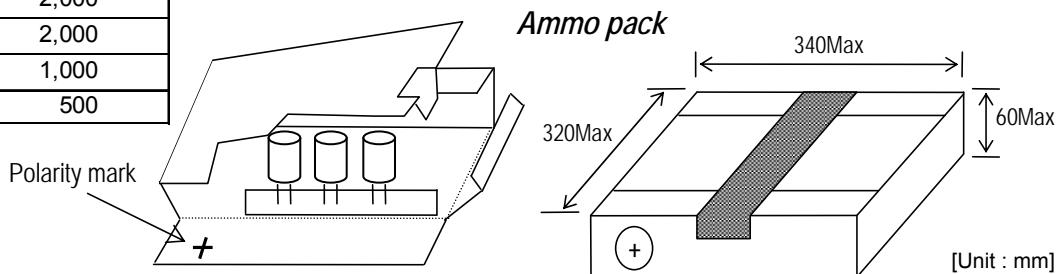
[Unit: mm]

Item \ ϕ DxL	4x5	5x8, 5x10	6.3x7, 6.3x8, 6.3x10	8x6, 8x8, 8x9, 8x11.5	10x12.5
Lead Forming Symbol	CG	CG	CG	CG	CG
Lead wire diameter ϕ d	0.45±0.05	0.6, 0.5±0.05	0.45, 0.6, 0.5±0.05	0.6±0.05	0.6±0.05
Lead wire Length H	3.1±0.3	3.1±0.3	3.1±0.3	3.1±0.3	3.1±0.3
Lead wire interval f	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5	5.0±0.5

Ammo Pack Quantity Unit

Packing Quantity (Ammo Pack)

Size (dia)	Packing Unit (pcs / Ammo Pack)
ϕ 5	2,000
ϕ 6.3	2,000
ϕ 8	1,000
ϕ 10	500



The lid of feeding side of the taping box shall be torn off at the perforation line.

Ammo Pack Taping Specifications (Radial lead type)

Taping Dimensions

Lead Forming (Symbol: Ex. PX) Nichicon P/N Symbol : R□□□□□□ M□□1 PX

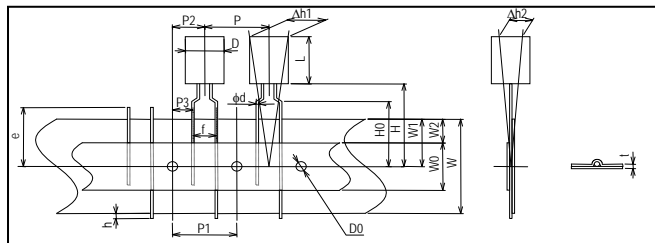
FPCAP P/N Symbol : FP-□□□RE□□□M-□□ P

2.5mm pitch taping

Taping Dimensions for $\phi 5$

Nichicon P/N Symbol : JT ($\phi 5 \times 8$) , JX ($\phi 5 \times 10$)

FPCAP P/N Symbol : JT ($\phi 5 \times 8$) , J ($\phi 5 \times 10$)

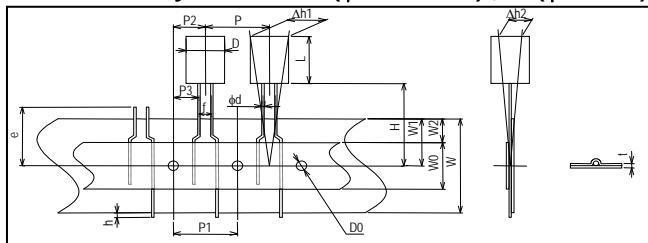


2.5mm pitch taping

Taping Dimensions for $\phi 6.3$

Nichicon P/N Symbol : JT ($\phi 6.3 \times 7$ to 8) , JX ($\phi 6.3 \times 10$)

FPCAP P/N Symbol : JT ($\phi 6.3 \times 7$ to 8) , J ($\phi 6.3 \times 10$)

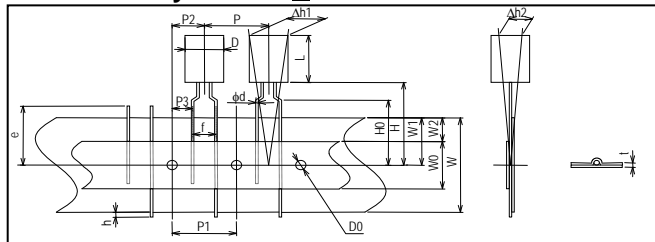


5.0mm pitch taping

Taping Dimensions for $\phi 5$, $\phi 6.3$, $\phi 8$

Nichicon P/N Symbol : PX

FPCAP P/N Symbol : P

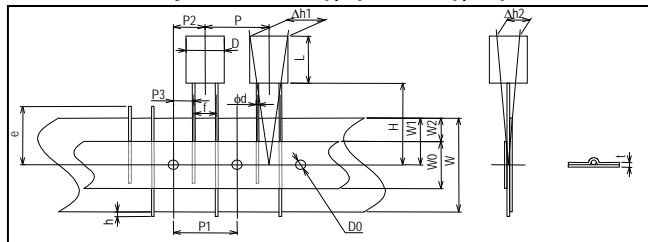


3.5mm($\phi 8$) or 5.0mm($\phi 10$) pitch taping

Taping Dimensions for $\phi 8$, $\phi 10$

Nichicon P/N Symbol : KX ($\phi 8$) , PH ($\phi 10$)

FPCAP P/N Symbol : K ($\phi 8$) , PH ($\phi 10$)



Specification Table

[Unit : mm]

Item	$\phi D \times L$	$\phi 5$			$\phi 6.3$			$\phi 8, \phi 10$		10×12.5
		6.3x7	5x8, 6.3x8	5x10, 6.3x10	6.3x7	5x8, 6.3x8	5x10, 6.3x10	8x6, 8x8, 8x9, 8x11.5		
Lead Forming Symbol (Nichicon P/N)		<u>JT</u>		<u>JX</u>	<u>PX</u>			<u>PX</u>	<u>KX</u>	<u>PH</u>
Lead Forming Symbol (FPCAP P/N)		<u>JT</u>		<u>J</u>	<u>P</u>			<u>P</u>	<u>K</u>	<u>PH</u>
Lead wire diameter	ϕd	0.45±0.05	0.6±0.05	0.5±0.05	0.45±0.05	0.6±0.05	0.5±0.05	0.6±0.05	0.6±0.05	0.6±0.05
Lead wire interval	f	2.5 +0.8/-0.2 ($\phi 6.3: 2.5 \pm 0.5$)			5.0 +0.8/-0.2			5.0 +0.8/-0.2	3.5 +0.8/-0.2	5.0 +0.8/-0.2
Pitch between components	P	12.7±1.0			12.7±1.0			12.7±1.0	12.7±1.0	12.7±1.0
Feed holes position gap	P1	12.7±0.3			12.7±0.3			12.7±0.3	12.7±0.3	12.7±0.3
Feed holes position gap	P2	6.35±1.0			6.35±1.0			6.35±1.0	6.35±0.5	6.35±0.5
Lead wire clinch height	H0	-			16.0±0.5			16.0±0.5	-	-
Components height	H	18.5±0.5			17.5±0.5			20.0±0.75	20.0±0.5	18.5±0.5
Base tape	W	18.0 +1.0/-0.5			18.0 +1.0/-0.5			18.0 +1.0/-0.5	18.0 +1.0/-0.5	18.0 +1.0/-0.5
Feed holes position gap	W1	9.0±0.5			9.0±0.5			9.0±0.5	9.0±0.5	9.0±0.5
Feed hole diameter	D0	4.0±0.2			4.0±0.2			4.0±0.2	4.0±0.2	4.0±0.2
Components alignment	Δh	2.0 max			2.0 max			2.0 max	2.0 max	2.0 max
Tape thickness	t	0.7±0.2			0.7±0.2			0.7±0.2	0.7±0.2	0.7±0.2

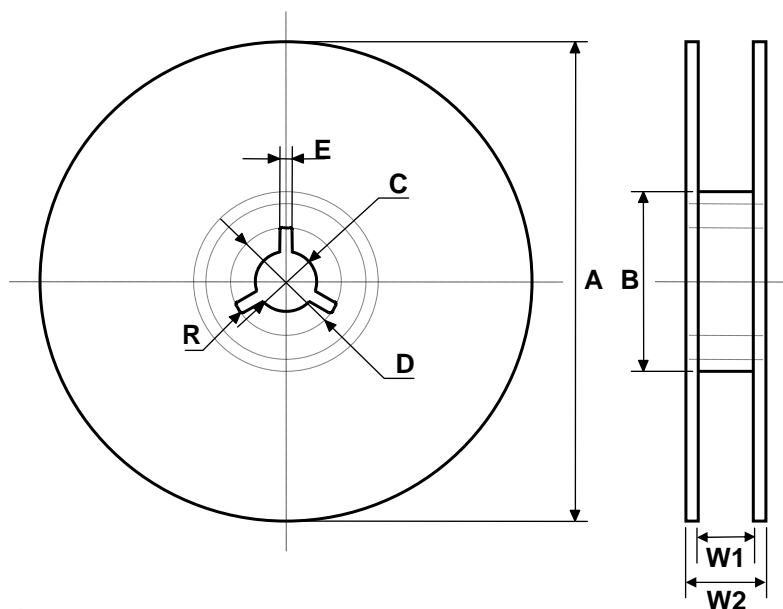
Packaging Unit Quantity for a Reel (SMD type)

Components are packaged as per following packing unit

Packing quantity (Reel)

Case Size ϕ DxL (mm)	Reel (pcs)	Packing Unit (pcs / Packing Bag)
ϕ 4x5.2	2,000	4,000
ϕ 5x5.7	1,000	2,000
ϕ 6.3x4.2	1,000	2,000
ϕ 6.3x4.7	1,000	2,000
ϕ 6.3x5.7	1,000	2,000
ϕ 6.3x7.7	900	1,800
ϕ 8x6.7	1,000	2,000
ϕ 8x7.7	900	1,800
ϕ 8x8.7	500	1,000
ϕ 8x11.7	500	1,000
ϕ 10x7.7	500	1,000
ϕ 10x12.4	400	800

Note: Please inquire for FPCAP by Packing Unit as above.



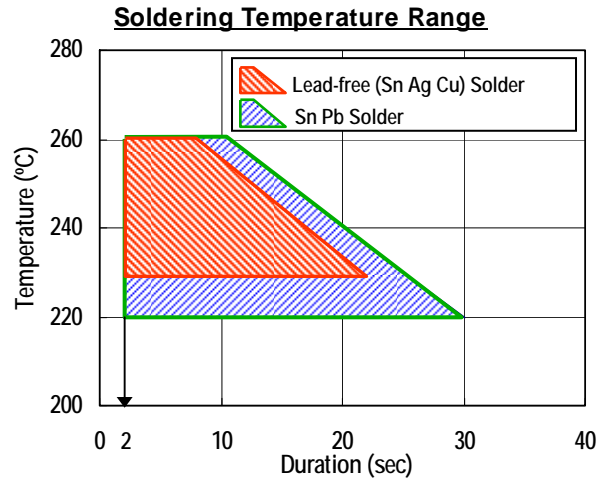
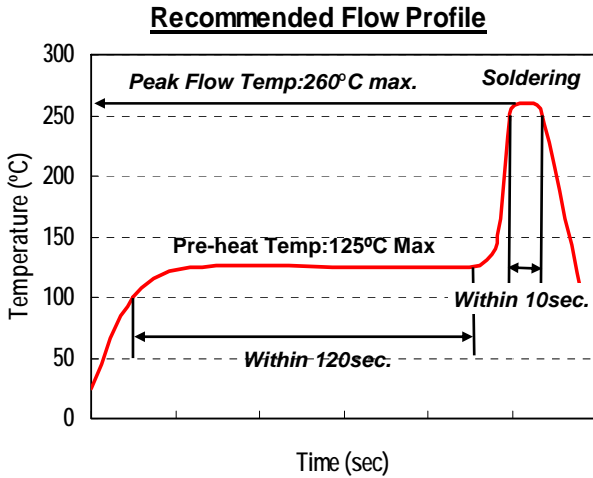
Dimensions of Reel

[Unit : mm]

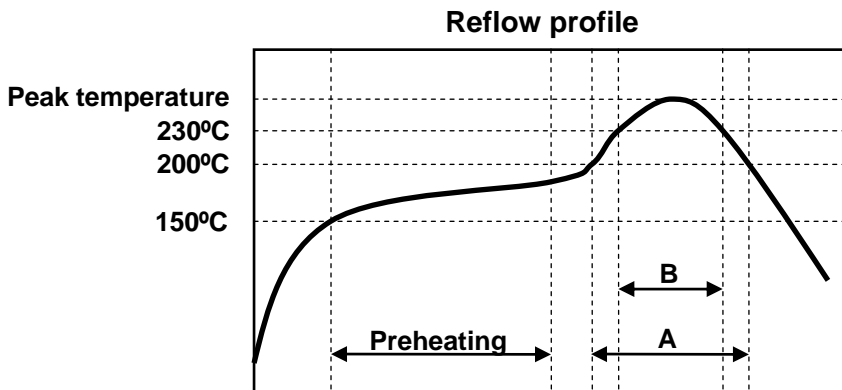
Size (dia)	A	B	C	D	E	W1	W2	R
ϕ 4, ϕ 5	± 2.0	± 1.0	± 0.5	± 1.0	± 0.5	± 0.8	± 0.8	
ϕ 6.3	380	80	13.0	21	2.0	13.4	17.4	1.0
ϕ 8, ϕ 10	380	80	13.0	21	2.0	17.4	21.4	1.0
	380	80	13.0	21	2.0	25.4	29.4	1.0

Soldering Profile on Lead-free and RoHS Compliance

Flow Soldering (Radial lead type)



Reflow Soldering (SMD type)



Item	Recommended Condition 1	Recommended Condition 2
Peak Temperature	260°C or less	250°C or less
Preheating	150°C to 180°C 90 seconds	150°C to 180°C 90 seconds
A	200°C and higher Within 60 seconds	200°C and higher Within 60 seconds
B	230°C and higher Within 40 seconds	230°C and higher Within 40 seconds
The number of reflow	Only 1 time	Twice or less

FPCAP Functional Polymer Aluminum Solid Electrolytic Capacitors

Type numbering system (Example: 2.5V560 μ F L8)

Nichicon Part Number

R	L8	0E	561	M	DN	1	
Type	Series name	Rated Voltage	Rated Capacitance	Capacitance Tolerance	Configuration	Control code	Taping & Lead Forming

FPCAP Part Number

FP	2R5	RE	561	M	L8	R	
Commodity Mark	Rated Voltage	Classification	Rated Capacitance	Capacitance Tolerance	Series name	Taping & Lead Forming	Control code

Type & Classification

Type & Classification	Nichicon P/N Symbol	FPCAP P/N Symbol
Radial Lead Type	R	RE
SMD Type		ME

Series Name

Classification	Series
Radial Lead Type	NS
	R7
	R5
	NU
	L8
	S8
	E5
	HT
	F8
NE	
SMD Type	PS, PA
	FS
	SS, SA, SB
	HS, HA
	SL, SH

Rated Voltage

Voltage [V]	Nichicon P/N Symbol	FPCAP P/N Symbol
2.5	0E	2R5
4.0	0G	4R0
6.3	0J	6R3
10	1A	010
16	1C	016
20	1D	020
25	1E	025

Rated Capacitance

Capacitance [μ F]	Symbol
10	100
22	220
100	101
220	221
1500	152

Capacitance Tolerance

Tolerances	Symbol
$\pm 20\%$	M

Control code*

Endurance	Nichicon P/N Symbol	FPCAP P/N Symbol
5000hrs	ASQ	-5K
2000hrs	1	no sign

* In case of endurance

Taping & Lead Forming

Classification	Taping & Lead Forming	Case Size ϕ DxL (mm)	Nichicon P/N Symbol	FPCAP P/N Symbol	
Radial Lead Type	Long lead (Bulk)	All	no sign	R	
	Cut lead (Bulk)	All	CG	CG	
	2.5mm pitch taping		$\phi 5 \times 8, \phi 6.3 \times 7, \phi 6.3 \times 8$	JT	JT
			$\phi 5 \times 10, \phi 6.3 \times 10$	JX	J
	3.5mm pitch taping		$\phi 8$	KX	K
	5.0mm pitch taping		$\phi 5, \phi 6.3, \phi 8$	PX	P
$\phi 10$			PH	PH	
SMD Type	Taping	Height under 5.2mm	GB	R	
		Height over 5.7mm	GS		
	Bulk	All	no sign	N	