code

Trimmed (Cut) or Formed Leads %Please refer to page26 about the FPCAP product spec.

- Radial lead type
- In order to identify correct part number for the processed lead product, cut/formed lead code must be added to bulk part number.
- If the bulk part number is up to 11th digit, processed lead coding shall be as follows
- In case 12th digit is numeral, it shall be:

| | 12 | 13 | 14 |
|----|----|----|-----------|
| s: | 1 | | |
| | 12 | 13 | 14 |
| | | P | \square |

• In case 12th digit is alphabet, it shall be: $12 \quad 13 \quad 14 \quad 15 \quad 16$

| | | | code | | | | (mm) | |
|----------------------|------|--------------------------|------|----------------------|------------|-----|--|--|
| Configurations | Cut | / Formed lead code | | Dimensio | ons (mm) | | Lead configurations | |
| Configurations | Code | Case length | φD | F | L | l | Lead conligurations | |
| | BA | 5mmL,7mmL | 4 | | | | (Code BA, BB) 1.5MAX. | |
| | | Jilline,/Illine | 5 | 5 | 5.0 | | (Code BA, BB) 1.5MAX. (Code FA, FV) 2.5MAX. | |
| | FA | Other length | 6.3 | 5 | 5.0 | | | |
| Forming and cutting | | Outer lengui | 8 | | | | <u> </u> ±0.5 *- * | |
| i onning and outling | BB | 5mmL,7mmL | 4 | | | | | |
| | | 0 | 5 | 5 | 3.5 | | | |
| | FV | Other length | 6.3 | - | | | | |
| | | | 8 | | | | ए | |
| | | | 10 | | | - | | |
| | | | | 5 | | | | |
| Forming | SZ | All Series | 12.5 | | 3.2 | | | |
| and cutting | | All Genes | 16 | | 0.2 | _ | | |
| | | | | 7.5 | | | Please contact your local Nichicon sales office for the following sizes. — 10mm Diameter parts with 9mm length or less, and 25mm length or larger | |
| | | | 18 | | | - | — 12.5 to18mm Diameter parts with 12.5mm length or less, and 46mm or larger ※This operation is available on product made in Japan. | |
| | | | 3 | 1.0 | | _ | | |
| | | | 4 | 1.5 | | _ | | |
| | | | 5 | 2.0 | | — | | |
| | | | 6.3 | 2.5 | 1 | — | | |
| | | | 8 | * 3.5 | | — | L±0.5 | |
| | CA | | 10 | 5 | 5.0 | — |] | |
| | CA | | 12.5 | 5 | 5.0 | _ | | |
| | | | 16 | 7.5 | | _ | ¢ | |
| Cutting | | | 18 | 7.5 | | | | |
| | | | 20 | 10 | | | | |
| | | | 22 | | | | | |
| | | | 25 | 12.5 | | | | |
| | CP | All length | | s above. | 4.5 | _ | | |
| | CC | All length | | s above. | 4.0 | | | |
| | CV | All length | | s above. | 3.5 | | % φ 8 × 5 = F: 2.5 | |
| | CT | All length All length | | s above. s above. | 3.2 3.0 | | % Please contact us for the ϕ 16 to ϕ 25 \times 12.5L products. | |
| | | Airiengin | 4 | s above. | 5.0 | | (64560.0) | |
| | AE | 5mmL,7mmL | 5 | 1 | | 1.1 | (\$4, 5, 6.3, 8) (Code [A]E]) 1.5 MAX. | |
| | | | 6.3 | 5 | 4.5 | | (Code AA) 2.5 MAX. (\$\vee{P10}, 12.5, 16, \$\vee{L^{\pm 0.5}}\$ | |
| | AA | Other length | 8 | 1 | | 1.3 | | |
| | | | 10 | _ | | | ┤╶┼ ┌────┤ /┯╧┙┽╴││ ╴╴┝┿╛─┬∞│ | |
| Snap-in | | | 12.5 | 5 | 4 - | | | |
| | | | 16 | 7.5 | 4.5 | 1.3 | | |
| | AA | All length | 18 | 7.5 | | | | |
| | | | 20 | 10 | | | | |
| | | | 22 | | 5.0 | 1.8 | | |
| | | | 25 | 12.5 | | | | |

• Conductive polymer aluminum solid electrolytic capacitors : Cutting configurations only

*Lead diameter (ϕ d) and lead pitch (P) are subject to capacitor specifications.

% End seal Configuration *Please contact us about the FPCAP.

| Configuration | ×2 | | *1 | | |
|---------------|----|---------|------------|----------------|--------------|
| φ(mm) | 3 | 5 · 6.3 | 4 · 8 · 10 | 12.5 • 16 • 18 | 20 · 22 · 25 |

Exception : 65, 66.3 case size of UMA, UMR, UMF, UMP, UMT, UMW, USA, USF, USP, USR, UST, USW, UPW (7mmL), UTT (7mmL) : configration *1 φ6.3 × 6mmL, φ6.3 × 9mmL, φ8 × 7mmL, φ8 × 9mmL, φ10 × 8mmL, φ10 × 10mmL size of PLF PLE , PLE , PLS , PLS , PLV , PLX , UNV, USV, UPV 9 will be put at 12th digit of type numbering system of UCS, UPZ : configration $\ensuremath{\ast}\ensuremath{2}$

20

* Conductive polymer aluminum solid electrolytic capacitors



ALUMINUM ELECTROLYTIC CAPACITORS

code

(mm)

(mm)

% Taped Leads for Automatic Insertion Systems

% Please refer to page 26 about the FPCAP product spec.

Capacitor

- Radial lead type (Applicable standard JIS C0806-2) In order to identify correct part number for the taped product, taping code must be
- added. • If the bulk part number is up to 11th digit, taping code shall be as follows: 12 13 14 1 \square
- In case 12th digit is numeral, it shall be



code

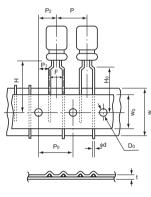
| | | S | pecificatio | ns | | Capacitor diameter | Taping code | | |
|--|-----------|---------------|---------------|-------------|----------------|-----------------------|-------------------|---------------------------------|--|
| | Packaging | Lead style | ⊕ ⊡ Leader | F | P ₀ | (¢) | Code | Applicable size | |
| | Ammo-pack | Formed lead | | See Table 1 | 12.7 | 3 to 8 | T E T P T A | | |
| | | Straight lead | | See Table 2 | 12.7 | 4 to 10 | ΤD | | |
| | | | | See Table 2 | 15.0 | 12.5 | ΤO | (| |
| | | | | See Table 2 | 15.0 | 16, 18 | ΤN | (φ16 ×15 to 25, φ18 × 15 to 25) | |

• In case 12th digit is alphabet, it shall be $\begin{array}{c} 12 \quad 13 \quad 14 \quad 15 \quad 16 \\ \hline \begin{array}{c} \\ \end{array} \times \times \end{array} \xrightarrow{} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \\ \end{array} \begin{array}{c} \\ \end{array}$

Notes: * Conductive polymer aluminum solid electrolytic capacitors

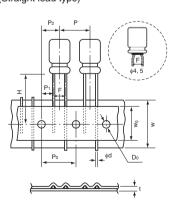
| Table | 1 |
|-------|---|

(Formed lead type)



| Case Size | | Formed Lead Type Case dia $(\phi) \times$ Length (L) | | | | | | | |
|--|--------------|--|-------|----------------------------------|---|-----------------------------------|--|--|--|
| Taping C | Tolerance | φ3×5 | φ4×11 | | $\begin{array}{cccc} \phi 4 \times 11 & \phi 6.3 \times 9 \\ \phi 5 \times 9 & \phi 6.3 \times 11 \\ \phi 5 \times 11 & \phi 6.3 \times 15 \\ \phi 5 \times 15 \end{array}$ | φ8×9 φ8×11.5 φ8×15 φ8×20 | | | |
| Item Ode | | TP | TP | TE | TA | TA | | | |
| ϕd Lead-wire diameter | ±0.05 | 0.40 | 0.45 | 0.45 (\$\$\phi 8 \times 7 : 0.5) | 0.5 (φ4 × 11 : 0.45) | 0.6 | | | |
| P Pitch of component | ±1.0 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | | | |
| Po Feed hole pitch | ±0.2 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | | | |
| P1 Hole center to lead | ±0.5 | 5.1 | 5.1 | 3.85 | 3.85 | 3.85 | | | |
| P2 Feed hole center to component center | ±1.0 | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 | | | |
| F Lead-to-lead distance | +0.8 -0.2 | 2.5 | 2.5 | 5.0 | 5.0 | 5.0 | | | |
| H Height of component from tape center | ±0.75 | 18.5 | 18.5 | 17.5 | 18.5 | 20.0 | | | |
| Ho Lead-wire clinch height | ±0.5 | 16.0 **3 | 16.0 | 16.0 | 16.0 | 16.0 | | | |
| W Tape Width | ±0.5 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | | | |
| Wo Hold down tape width | MIN. | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | | | |
| φD_0 Feed hole diameter | ±0.2 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | | | |
| t Total tape thickness | ±0.2 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | | | |

(Straight lead type)



| Table 2 (mm) | | | | | | | | | | | |
|------------------|--|--------------|------------------|--|------------------|------|------|------|------|--------|------------|
| | | | | Straight Lead Type Case dia $(\phi) \times$ Length (L) | | | | | | | |
| Case Size | Case Size | Tolerance | φ4 × 5 φ4 × 7 | φ5 | φ6.3 | φ8×5 | φ8×7 | φ8 | φ10 | φ 12.5 | φ16 φ18 |
| | Sode | | TP | TP, TD | TP, TD | TP | TD | TD | TD | то | TN |
| φd L | .ead-wire diameter | ±0.05 | 0.45 | 0.45 0.5, 0.6 | 0.45 0.5, 0.6 | 0.45 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 |
| РР | Pitch of component | ±1.0 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 15.0 | 30.0 |
| Po F | eed hole pitch | ±0.2 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 15.0 | 15.0 |
| Р1 н | lole center to lead | ±0.5 | 5.1 (%1 5.35) | 5.1 (*1 5.35) | 5.1 | 5.1 | 4.6 | 4.6 | 3.85 | 5.0 | 3.75 |
| | eed hole center component center | ±1.0 | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 | 7.5 | 7.5 |
| | ead-to-lead listance | +0.8 -0.2 | 2.5*1 | 2.5*1 | 2.5 | 2.5 | 3.5 | 3.5 | 5.0 | 5.0 | 7.5*2 |
| | leight of component rom tape center | ±0.75 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| Wтa | ape Width | ±0.5 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 |
| W ₀ H | lold down tape width | MIN. | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 12.5 | 12.5 |
| φD0 F | eed hole diameter | ±0.2 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| t To | otal tape thickness | ±0.2 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |

- Special taping specifications on H. F. and K. dimensions other than the above figures are available upon request.
- Conductive polymer aluminum solid electrolytic capacitors : Straigh lead type only
- Only the above mentioned dimensions are specified.

Notes:

* 1 F = 2.0mm is also available, provided

Taping code to be TC. % 2 Tolerance on F for ϕ 16 and ϕ 18 units shall be ±0.8mm.

% 3 Tolerance on Ho for φ3 units shall be 16.0 MIN.

(mm)

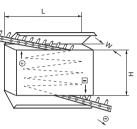
Q'ty / Box

2,000

Packaging

• Ammo-pack (Flat box type)





L

340

Н

150

W

50

3 × 5

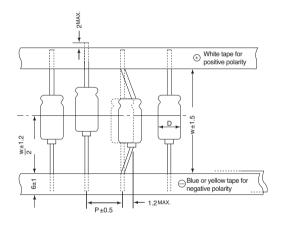
| 340 | 200 | 50 | 4 × 5, 4 × 7 | 2,000 |
|------------|-----|----|---|-------|
| 340 | 250 | 50 | 5 × 5, 5 × 7 | 2,000 |
| 340 | 200 | 50 | 8 × 5, 8 × 7, 8 × 8 | 1,000 |
| 340 | 300 | 50 | 6.3 × 5, 6.3 × 6, 6.3 × 7 | 2,000 |
| 340 260 54 | | 54 | 4 × 11, 5 × 9, 5 × 11, 5 × 15 | 2,000 |
| | | 54 | 8 × 9, 8 × 10, 8 × 11.5, 8 × 12, 8 × 15 | 1,000 |
| 340 | 200 | 54 | 10 × 8, 10 × 9, 10 × 10, 10 × 12.5, 10 × 13, 10 × 15, 10 × 16 | 500 |
| 340 | 300 | 54 | 6.3 × 9, 6.3 × 10.5, 6.3 × 11, 6.3 × 15 | 2,000 |
| 340 | 260 | 62 | 8 × 20 | 1,000 |
| 340 | 200 | 62 | 10 × 20 | 500 |
| 340 | 200 | 65 | 10 × 25 | 500 |
| | | | 12.5 × 12.5, 12.5 × 15, 12.5 × 20 | 500 |
| 330 | 290 | 65 | 12.5 × 25 | 500 |
| | | | 18 × 15, 18 × 20, 18 × 25 | 250 |
| 320 | 230 | 65 | 16 × 15, 16 × 20, 16 × 25 | 250 |

Case Size $(\phi D \times L)$

• Axial lead type (Applicable standard JIS C0805) The following code shall be put at 12th to 14th digit of the corresponding type number of capacitors. (mm)

| Taping Sp | ecifications | | Tanina aada | | |
|---------------------------|-----------------------------|-------------------|-------------|--------------------|--|
| Dim. W (Tape distance) | Dim. P (Component Pitch) | Case dia (ø) | Taping code | Q'ty / Reel (pcs.) | |
| | | 5 | | 1,600 | |
| 52.4 | 10 | 6.3 | 1LS | 1,300 | |
| | | 8 | | 1,000 | |
| | | 5 | | 1,600 | |
| 63.5 | 10 | 6.3 | 1LV | 1,300 | |
| | | 8 | | 1,000 | |
| | | 5 | | 1,600 | |
| 73.0 | 10 | 6.3 | 1LY | 1,300 | |
| | | 8 | | 1,000 | |
| 52.4 | 15 | 10 | 417 | 500 | |
| 52.4 | 15 | 13 (except 31.5L) | 1LT | 350 | |
| 63.5 | 15 | 10 | 1LW | 500 | |
| 03.5 | 15 | 13 | ILVV | 350 | |
| 72.0 | 15 | 10 | 117 | 500 | |
| 73.0 | 15 | 13 | 1LZ | 350 | |

Please contact us for complete information on the package dimensions for tapes axial lead capacitors.



FPCAP Lead forming (Radial lead type)

RNS, RR7, RR5, RL8, RE5, RS8, RF8, RNU, RNE, RNL, RS6, RHT

Components are packaged as per following packing unit.

Packing Quantity (Bulk)

| Case Size | Long | Lead | Cut Lead | | | |
|--|-----------------------------|--|-----------------------------|--|--|--|
| ¢D×L (mm) | Quantity vinyl bag (PCS) | Minimum quantity (PCS / Carton Box) | Quantity vinyl bag (PCS) | Minimum quantity (PCS / Carton Box) | | |
| <i>φ</i> 4×5 | 200 | 8,000 | 200 | 8,000 | | |
| ¢5×8, ¢5×10 | 200 | 3,200 | 200 | 4,000 | | |
| \$ | 200 | 4,000 | 200 | 4,000 | | |
| ¢6.3×8, ¢6.3×10 | 200 | 3,200 | 200 | 4,000 | | |
| \$\$\$\$, \$\$\$\$, \$\$ | 200 | 3,200 | 200 | 4,000 | | |
| ¢8×11.5 | 100 | 2,000 | 200 | 2,400 | | |
| <i>∲</i> 8×20 | 100 | 1,200 | 100 | 1,600 | | |
| ¢10×12.5 | 100 | 1,600 | 100 | 2,000 | | |
| <i>∲</i> 10×20 | 100 | 800 | 100 | 1,200 | | |

Please note the order quantity must be in multiples of the minimum quantity.

Cut Lead (Bulk) Dimensions

 Lead Forming (Symbol:CG)

 Nichicon P/N : R

 R

 R

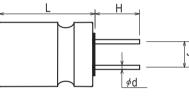
 B

 CG

 FPCAP P/N : FP

 R

 CG



[Unit : mm]

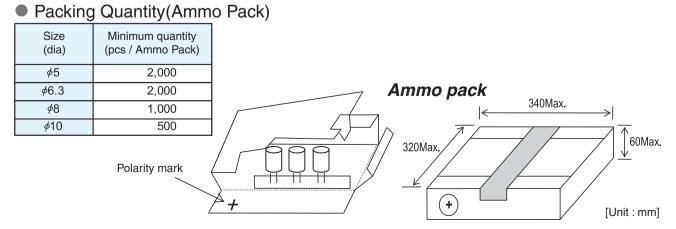
| ¢D×L | ¢D×L م | | ¢5×8, ¢5×10 | ¢6.3×5,¢6.3×6, ¢6.3×7,¢6.3×8,¢6.3×10 | \$ | ¢10×12.5,¢10×20 | |
|---------------------|--------|-----------|---------------|---|--|-----------------|--|
| Lead Forming Symbol | | CG | CG | CG | CG | CG | |
| Lead Wire Diameter | ¢d | 0.45±0.05 | 0.5, 0.6±0.05 | 0.45, 0.5, 0.6±0.05 | 0.6±0.05 | 0.6±0.05 | |
| Lead Wire Length | Н | 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 | |

μ

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

FPCAP Taped Leads for Automatic Insertion Systems (Radial lead type)

RNS, RR7, RR5, RL8, RE5, RS8, RF8, RNU, RNE, RNL, RS6, RHT

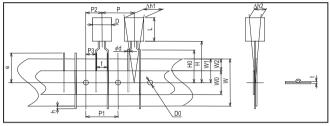


The lid of feeding side of the taping box shall be torn off at the perforation line.

Taping Dimensions

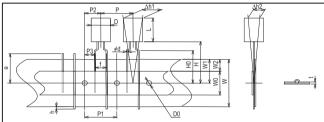
Lead Forming (Symbol:Ex. PX) Nichicon P/N Symbol : R

- 2.5mm pitch taping Taping Dimensions for *φ*5
- Nichicon P/N Symbol : \underline{JT} (ϕ 5×8) , \underline{JX} (ϕ 5×10) FPCAP P/N Symbol : \underline{JT} (ϕ 5×8) , \underline{J} (ϕ 5×10)



■ 5.0mm pitch taping Taping Dimensions for *φ*5, *φ*6.3, *φ*8

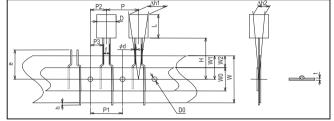
Nichicon P/N Symbol : <u>PX</u> FPCAP P/N Symbol : <u>P</u>



■ 2.5mm pitch taping Taping Dimensions for *\(\phi\)*6.3

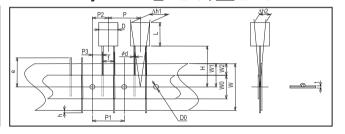
FPCAP P/N Symbol : FP-

Nichicon P/N Symbol : \underline{JT} (ϕ 6.3×5to8), \underline{JX} (ϕ 6.3×10) FPCAP P/N Symbol : \underline{JT} (ϕ 6.3×5to8), \underline{J} (ϕ 6.3×10)



■ 3.5mm(\$\phi 8\$) or 5.0mm(\$\phi 10\$) pitch taping Taping Dimensions for \$\phi 8\$, \$\phi 10\$

Nichicon P/N Symbol : \underline{KX} (ϕ 8) , \underline{PH} (ϕ 10) FPCAP P/N Symbol : \underline{K} (ϕ 8) , \underline{PH} (ϕ 10)



• Specification Table

[Unit : mm]

| Item ØDxL | φ6.3×6, φ6.3×7 | <i>∳</i> 5×8, <i>∲</i> 6.3×8 | φ6.3×5 φ5×8 | <i>φ</i> 5×10, <i>φ</i> 6.3×10 | ¢6.3×6, ¢6.3×7 | <i>∳</i> 5×8, <i>∲</i> 6.3×8 | <i>∳</i> 5×10, <i>∲</i> 6.3×5, <i>∲</i> 6.3×10 | ¢8×6 , ¢8×9 , φ8× | | ∲10×12.5 ∳10×20 |
|------------------------------------|-------------------|---------------------------------|----------------|-----------------------------------|-------------------|---------------------------------|--|----------------------|----------------|--------------------|
| Lead Forming Symbol (Nichicon P/N) | | JT | | JX | | РХ | | РХ | КХ | PH |
| Lead Forming Symbol (FPCAP P/N) | | JT | | J | | Р | | Р | К | PH |
| Lead Wire Diameter Ød | 0.45 | 0.6 | 0.5 | 0.5 | 0.45 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 |
| Tolerance | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 |
| Lead Wire Interval f | 2.5 + | 0.8/-0.2 | (¢6.3: 2.5 | 5±0.5) | | 5.0 +0.8/-0.2 | 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 | 5±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 | 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 | | 1 | 8.0 +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 Holes Diameter D0 | 4.0±0.2 | | | 4.0±0.2 | | 4.0±0.2 | 4.0±0.2 | 4.0±0.2 | | |
| Components Alignment Ah | | 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 |