

TAPING SPECIFICATIONS (Applicable standard JIS C 0806-3)

SURFACE MOUNT TYPE (TAPING)



◆CARRIER TAPE [mm]

Fig.1

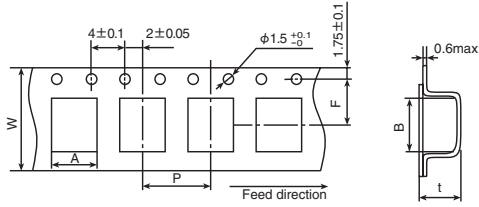


Fig.4

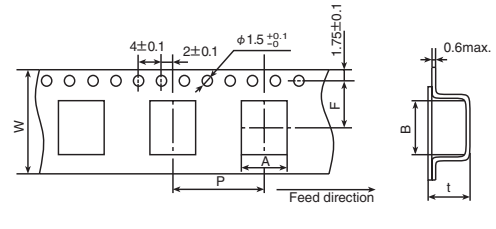


Fig.2

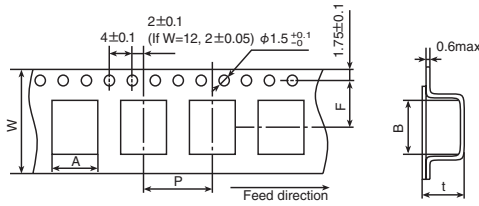


Fig.5

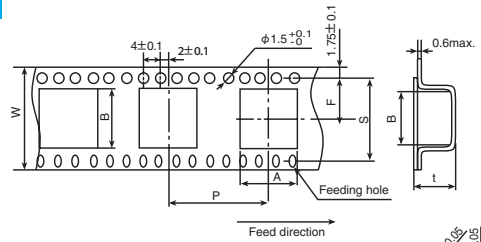
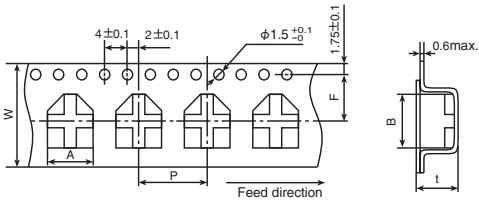


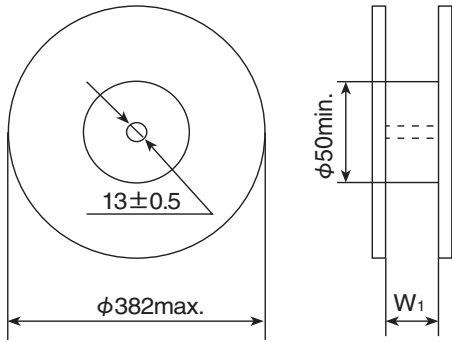
Fig.3



[mm]

Series	Items	W	A	B	F	P	t	S	Fig.		
		±0.3	±0.2	±0.2	±0.1	±0.1	±0.2	±0.1			
Alchip™	D55	12.0	4.7	4.7	5.5	8.0	5.7	—	1		
	D60,D61	12.0	4.7	4.7	5.5	8.0	6.3	—	1		
	D73	12.0	4.6	4.6	5.5	8.0	7.5	—	1		
	E40	12.0	5.7	5.7	5.5	12.0	4.4	—	2		
	E46	12.0	5.7	5.7	5.5	12.0	4.9	—	2		
	E55	12.0	5.7	5.7	5.5	12.0	5.7	—	2		
	MVA/MVE	E60,E61	12.0	5.7	5.7	5.5	12.0	6.3	—	2	
	MZS/MZL	E73	16.0	5.7	5.7	7.5	12.0	7.5	—	2	
	MZR/MZJ	F30	16.0	7.5	8.0	7.5	12.0	3.7	—	3	
	MZA/MVY	F45,F46	16.0	7.0	7.0	7.5	12.0	4.9	—	2	
	MZF/MZE	F55	16.0	7.0	7.0	7.5	12.0	5.7	—	2	
	MZK/MLA	F60,F61	16.0	7.0	7.0	7.5	12.0	6.3	—	2	
	MLF/MLE	F73	16.0	7.0	7.0	7.5	12.0	7.5	—	2	
	MLK/MVL	F80	16.0	7.0	7.0	7.5	12.0	8.2	—	2	
	MVJ/MXB	F90	16.0	7.0	7.0	7.5	12.0	9.2	—	2	
	MVS/MVH	FA0	16.0	7.0	7.0	7.5	12.0	10.3	—	2	
	MHL/MHB	H63	16.0	8.7	8.7	7.5	12.0	6.8	—	2	
	MHJ/MHK	H70	24.0	8.7	8.7	11.5	12.0	7.3	—	2	
	MKB	H80	24.0	8.7	8.7	11.5	12.0	8.3	—	2	
	NPCAP™	PMF	24.0	8.7	8.7	11.5	16.0	11.0	—	4	
PXN/PXT		24.0	8.7	8.7	11.5	16.0	12.7	—	4		
PXJ/PXG		24.0	8.7	8.7	11.5	16.0	8.3	—	4		
PXK/PXS		J80	24.0	10.7	10.7	11.5	16.0	8.3	—	4	
PXF/PXE		JA0	24.0	10.7	10.7	11.5	16.0	11.0	—	4	
PXA/PXD		JC0	24.0	10.7	10.7	11.5	16.0	12.8	—	4	
PXH		JC5	24.0	10.7	10.7	11.5	16.0	12.8	—	4	
Hybrid		HXE/HXJ	JH0	32.0	10.7	10.7	14.2	24.0	17.1	28.4	5
		HXC/HXD	KE0	32.0	13.4	13.4	14.2	24.0	14.0	28.4	5
		HXA/HXB	KG5	32.0	13.4	13.4	14.2	24.0	16.5	28.4	5
		KN0	32.0	13.4	13.4	14.2	24.0	22.1	28.4	5	
		LH0	44.0	17.5	17.5	20.2	28.0	16.8	40.4	5	
		LN0	44.0	17.5	17.5	20.2	28.0	22.1	40.4	5	
		MH0	44.0	19.5	19.5	20.2	32.0	17.1	40.4	5	
	MN0	44.0	19.5	19.5	20.2	32.0	22.1	40.4	5		

◆ REEL DIMENSIONS [mm]



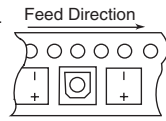
◆ QUANTITY PER REEL/BOX

Series	Size code	Quantity (pcs/reel)	Quantity (pcs/box)	W ₁ (mm)	
Alchip™	D55,D60,D61	2,000	10,000	14	
	MVA/MVE	1,500	7,500	14	
	MZS/MZL	E55,E60,E61	1,000	5,000	14
	MZR/MZJ	E73	1,000	5,000	18
	MZA/MVY	F55,F60,F61,F73	1,000	5,000	18
	MZF/MZE	F80	900	4,500	18
	MZK/MLA	F90	800	4,000	18
	MLF/MLK	H63	1,000	5,000	18
	MLK/MVL	HA0	500	1,500	26
	MVJ/MXB	JA0	500	1,500	26
	MHS/MVH	JC5	400	1,200	26
	MHL/MHB	JH0	200	600	34
	MHJ/MHK	KE0	250*1	750*1	34
	MKB	KG5	200*1	600*1	34
	Hybrid	KN0	150	450	34
		LH0	175*1	350*1	46
HXE/HXJ		LN0	125*1	250*1	46
HXC/HXD		MH0	150*1	300*1	46
HXA/HXB		MNO	100*1	200*1	46
NPCAP™		E40,E46,E60,E61	1,000	10,000	14
	F30	2,000	10,000	18	
	F45,F46,F60,F61	1,000	7,000	18	
	F80	900	6,300	18	
	PXN/PXT	FA0	750	5,250	18
	PXJ/PXG	H70	1,000	6,000	26
	PXK/PXS	H80	900	5,400	26
	PXF/PXE	HA0	500	3,000	26
	PXA/PXD	HC0	400	1,200	26
	PXH	J80	500	3,000	26
		JA0	500	3,000	26
		JC0	400	1,200	26

*1 : Changed the packing quantity. (Size Code : KE0 to MNO)

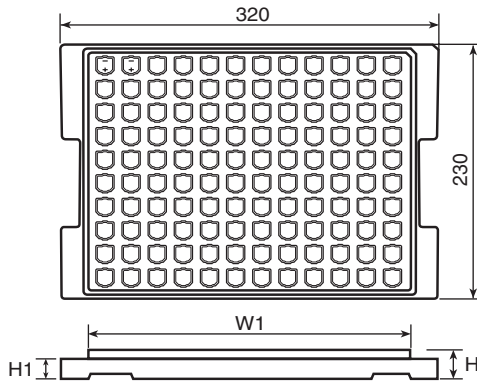
◆ POLARITY

- Alchip™ -MVA/MVE/MZS/MZL
MZR/MZJ/MZA
MVY/MZF/MZE
MZK/MLA/MLF
MLE/MLK/MVL
MVJ/MXB/MHS
MVH/MHL/MHB
MHJ/MHK/MKB
- NP CAP™ -PMF
PXN/PXT/PXJ/PXG
PXK/PXS/PXF/PXE
PXA/PXD/PXH
- Hybrid -HXE/HXJ/HXC/HXD
HXA/HXB

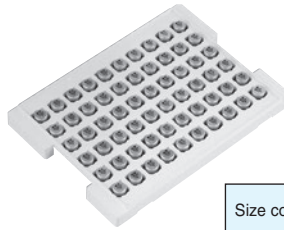


SURFACE MOUNT TYPE (TRAY)

◆ DIMENSIONS [mm]



● TRAY CODE : TR

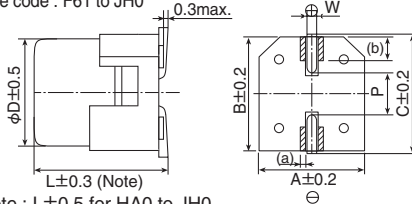


Size code	H [mm]	W ₁ [mm]	H ₁ [mm]	Quantity [pcs/tray]	Quantity [pcs/box]
KE0 & KG5	21.0	284	18.5	120	600
LH0 & LN0	28.0	284	24.0	80	400
MH0 & MNO	28.0	284	24.0	60	300

VIBRATION RESISTANT STRUCTURE (Terminal code : G)

◆ DIMENSIONS [mm]

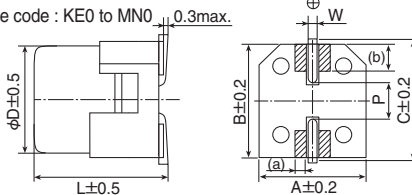
- Terminal code : G
- Size code : F61 to JH0



Note : L±0.5 for HA0 to JH0

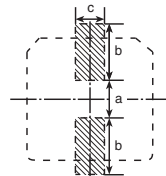
⊗ : Dummy terminals

- Size code : KE0 to MNO



⊗ : Dummy terminals

◆ RECOMMENDED SOLDER LAND



⊗ Solder land on PC board

The vibration resistant model supports the vibration condition of 30G.
Since vibration is affected by solder thickness and other characteristics and conditions, please contact us for details.

Size code	Dimensions of products (mm)								Solder land (mm)			
	D	L	A	B	C	W	P	(a)	(b)	a	b	c
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9	(0.7)	(1.4)	1.9	3.5	3.3
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9	(0.7)	(1.4)	1.9	3.5	3.3
HA0	8.0	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1	(0.5)	(1.8)	3.1	4.2	3.5
JA0	10.0	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5	(0.5)	(2.1)	4.5	4.4	3.5
JC5	10.0	12.5	10.3	10.3	11.0	0.7 to 1.1	4.5	(0.5)	(2.1)	4.5	4.4	3.5
JH0	10.0	16.5	10.3	10.3	11.0	1.0 to 1.3	4.2	(0.5)	(2.1)	4.0	4.7	3.8
KE0	12.5	13.5	13.0	13.0	13.7	1.0 to 1.3	4.2	(1.3)	(3.0)	3.4	6.3	9.3
KG5	12.5	16.0	13.0	13.0	13.7	1.0 to 1.3	4.2	(1.3)	(3.0)	3.4	6.3	9.3
KN0	12.5	21.5	13.0	13.0	13.7	1.0 to 1.3	4.2	(1.3)	(3.0)	3.4	6.3	9.3
LH0	16.0	16.5	17.0	17.0	18.0	1.0 to 1.3	6.5	(2.0)	(3.0)	4.7	7.8	9.6
LN0	16.0	21.5	17.0	17.0	18.0	1.0 to 1.3	6.5	(2.0)	(3.0)	4.7	7.8	9.6
MH0	18.0	16.5	19.0	19.0	20.0	1.0 to 1.3	6.5	(2.0)	(4.0)	4.7	8.8	9.6
MNO	18.0	21.5	19.0	19.0	20.0	1.0 to 1.3	6.5	(2.0)	(4.0)	4.7	8.8	9.6

() ; Ref.

RADIAL LEAD TYPE TAPING SPECIFICATIONS (Applicable standard JIS C 0806-2)

Conductive Polymer Aluminum Solid Capacitors
Conductive Polymer Hybrid Aluminum Electrolytic Capacitors

◆ DIMENSION [mm]

Fig.1

Taping Code : TX
φD=φ5

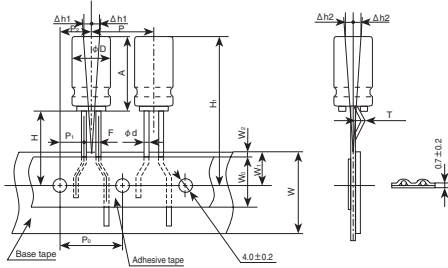
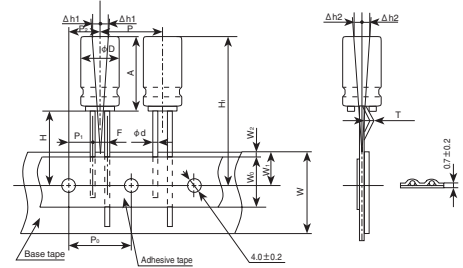


Fig.2

Taping Code : TD
φD=φ6.3 to 10

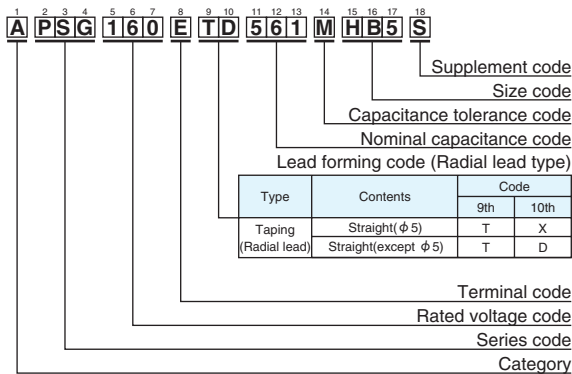


Code	Taping Code	Case size		φd	P	P ₀	P ₁	P ₂	F	W	W ₀	W ₁	W ₂	H	H ₁	φD ₀	Δh ₁	Δh ₂	t	T	Fig
		φD	A																		
tol.	—	—	—	±0.05	±1.0	±0.2	±0.7	±1.0	$\begin{matrix} +0.2 \\ -0.2 \end{matrix}$	±0.5	min.	±0.5	max.	±0.75	max.	±0.2	±0.2	±0.2	±0.3	±1.0	
Nominal	TX	5	8	0.45 ^{*1}	12.7	12.7	5.35	6.35	2.0 ^{*2}	18	10	9.0	2.5	18.5	28.25	4.0	0	0	0.7	0	1
		6.3	5	0.45	12.7	12.7	5.1	6.35	2.5	18	10	9.0	2.5	18.5	28.25	4.0	0	0	0.7	0	2
	TD	6.3	8	0.6	12.7	12.7	5.1	6.35	2.5	18	10	9.0	2.5	18.5	28.75 ^{*1}	4.0	0	0	0.7	0	2
		8	8	0.6	12.7	12.7	4.6	6.35	3.5	18	10	9.0	2.5	20.0	29.75	4.0	0	0	0.7	0	2
		8	11.5	0.6 ^{*1}	12.7	12.7	4.6	6.35	3.5	18	10	9.0	2.5	20.0	33.75	4.0	0	0	0.7	0	2
		8	16	0.6	12.7	12.7	4.6	6.35	3.5	18	10	9.0	2.5	20.0	38.25	4.0	0	0	0.7	0	2
		8	20	0.6	12.7	12.7	4.6	6.35	3.5	18	10	9.0	2.5	20.0	42.25	4.0	0	0	0.7	0	2
		10	10.5	0.6	12.7	12.7	3.85	6.35	5.0	18	10	9.0	2.5	18.5	30.75	4.0	0	0	0.7	0	2
		10	11.5	0.6 ^{*1}	12.7	12.7	3.85	6.35	5.0	18	10	9.0	2.5	18.5	32.25	4.0	0	0	0.7	0	2
		10	12.5	0.6	12.7	12.7	3.85	6.35	5.0	18	10	9.0	2.5	18.5	33.25	4.0	0	0	0.7	0	2
		10	16	0.6	12.7	12.7	3.85	6.35	5.0	18	10	9.0	2.5	18.5	36.75	4.0	0	0	0.7	0	2
10	20	0.6	12.7	12.7	3.85	6.35	5.0	18	10	9.0	2.5	18.5	40.75	4.0	0	0	0.7	0	2		

* 1 : Each product family has different value. Please refer to each page.
* 2 : For case size φ5×8 (Taping code : TX), H dimension shall be 2.0^{+0.5/-0.2}.

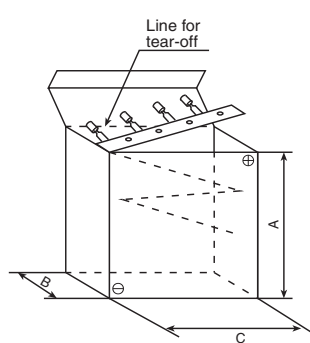
TAPING CODE

Example



QUANTITY PER AMMO PACK

Ammo pack box



Typical example

Case size φD×L(mm)	A (mm)	B (mm)	C (mm)	Quantity (pcs.)
φ5 L=8mm	240	51	336	2,000
φ6.3 L=5 & 8mm	285	51	336	2,000
φ8	L=8 to 11.5mm	240	51	336
	L=16mm	240	56	336
φ10	L=20mm	240	62	336
	L=10.5 to 12.5mm	190	51	337
	L=16mm	308	56	337
L=20mm	308	62	337	800

RADIAL LEAD TYPE TAPING SPECIFICATIONS (Applicable standard JIS C 0806-2)

Aluminum Electrolytic Capacitors

◆DIMENSION [mm]

Fig.1

Taping Code : TC
φD=φ5 to 8

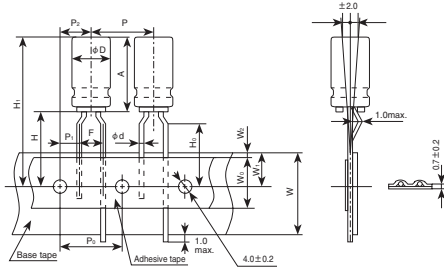


Fig.2

Taping Code : TD
φD=φ5

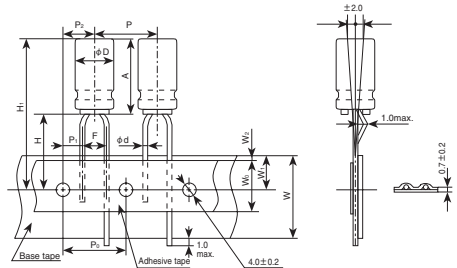


Fig.3

Taping Code : TD
φD=φ6.3 to 12.5

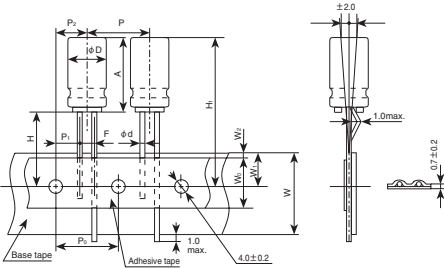
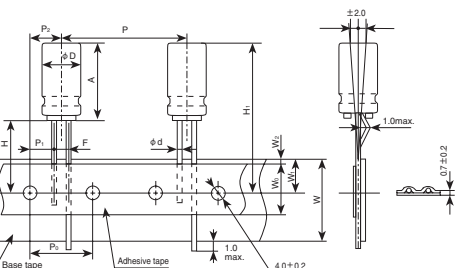


Fig.4

Taping Code : TE
φD=φ12.5



Code	Taping Code	Case size		φd	P	P ₀	P ₁	P ₂	F	W	W ₀	W ₁	W ₂	H	H ₀	H ₁	Fig
		φD	A														
tol.		—	—	±0.05	±1.0	±0.2	±0.7	±1.0	±0.8 ±0.2	±0.5	min.	±0.5	max.	±0.75	±0.5		
Nominal	TD	5	11 to 15	0.5* ¹	12.7	12.7	5.1 3.85	6.35	2.5 5	18.0	10.0	9.0	1.5	18.5	16.0	HI=H+A Check insertion machine specs.	2
	TC																1
	TD	6.3	11 to 15	0.5	12.7	12.7	5.1 3.85	6.35	2.5 5	18.0	10.0	9.0	1.5	18.5	16.0		3
	TC																1
	TD	8	11.5 to 20	0.6	12.7	12.7	4.6 3.85	6.35	3.5 5	18.0	10.0	9.0	1.5	20.0	16.0		3
	TC																1
tol.		±0.5	max.	±0.05	±1.0	±0.3	±0.7	±1.3	±0.8 ±0.2	±0.5	min.	±0.5	max.	±0.75 ±0.0			
Nominal	TD	10	21	0.6* ¹	12.7	12.7	3.85	6.35	5	18.0	12.5	9.0	1.5	18.0	—	3	
	TD															3	
	TE	12.5	26	0.6* ¹	25.4	12.7	3.85	6.35	5	18.0	12.5	9.0	1.5	18.0	—	4	

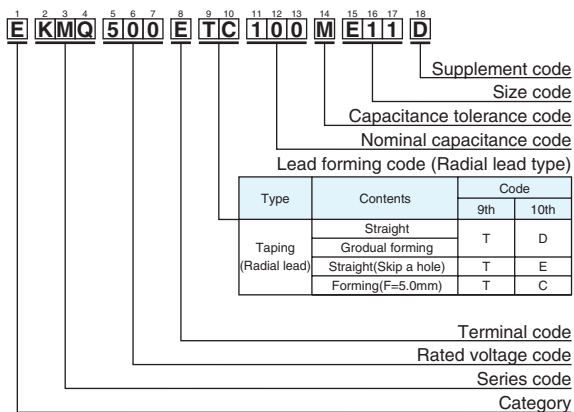
* 1 : Each product family has different value. Please refer to each page.

* 2 : The taping for size φ 16 and φ 18 is available as a custom design.

* 3 : For the Taping code TD products with case diameter ≥ 12.5mm, you can also select an option (Taping code: TS) that enhanced taping packaging.

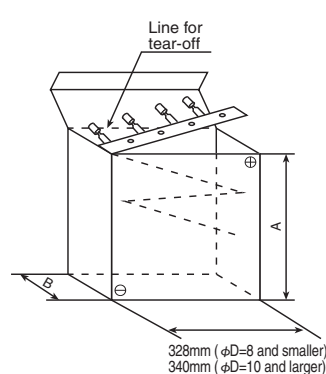
TAPING CODE

Example



QUANTITY PER AMMO PACK

Ammo pack box

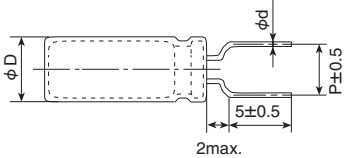
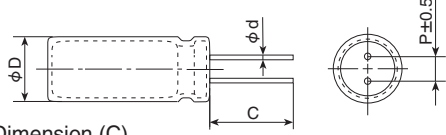
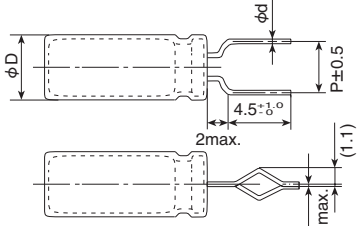
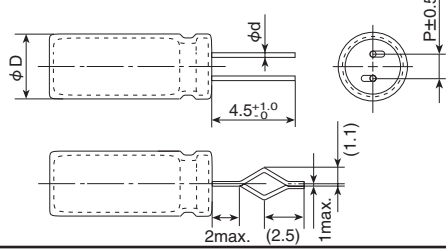
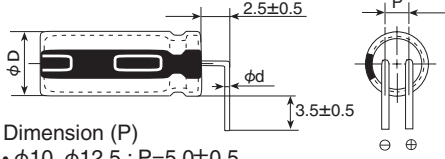
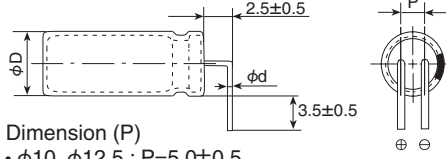
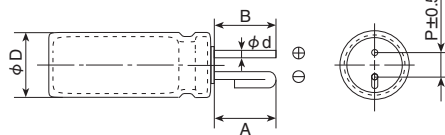


Typical example

Case size φD×L(mm)	A (mm)	B (mm)	Quantity (pcs.)
φ5	L=11 to 15mm	232 51	2,000
	L=17mm	235 60	
φ6.3	L=11 to 15mm	284 51	2,000
	L=17mm	284 55	
φ8	L=11.5 to 15mm	232 51	1,000
	L=17 & 20mm	235 60	
φ10	L≤16mm	308 56	800
	L=17 to 20mm	308 62	
	L=21 to 25mm	308 67	
	L=26 to 30mm	308 71	
φ12.5	L≤16mm	308 62	500
	L=17 to 25mm	308 67	

RADIAL LEAD TYPE (CUT/FORMED LEAD)

The following lead configurations are available. When ordering, please indicate the type of lead configurations by using the appropriate supplement code, such as C3, FC, MC or RC in the product part number.

Terminal type	Size	Terminal type	Size												
<p>●Lead code : FC (Forming Cut type)</p> 	φD=5 to 8	<p>●Lead code : C3 (Cutting type)</p>  <p>Dimension (C)</p> <ul style="list-style-type: none"> • φD= 5 to 8: C3: 3.5±0.5(Second standard C5: 5.0±0.5) • φD=10 to 18: C3: 3.5±0.5(Second standard C5: 5.0±0.5) 	φD=5 to 18												
<p>●Lead code : FM (Snap-in type)</p> 	φD=5 to 8	<p>●Lead code : MC (Snap-in type)</p> 	φD=10 to 18												
<p>●Lead code : BC (Horizontal type)*3</p>  <p>Dimension (P)</p> <ul style="list-style-type: none"> • φ10, φ12.5 : P=5.0±0.5 • φ14.5, φ16, φ18 : P=7.5±0.5 	φD=10 to 18	<p>●Lead code : BD (Horizontal type)*3</p>  <p>Dimension (P)</p> <ul style="list-style-type: none"> • φ10, φ12.5 : P=5.0±0.5 • φ14.5, φ16, φ18 : P=7.5±0.5 	φD=10 to 18												
<p>●Lead code : IJ (Forming Cut type)</p>  <p>Dimension</p> <table border="1"> <thead> <tr> <th>φD</th> <th>A · B</th> <th>φd</th> <th>P</th> </tr> </thead> <tbody> <tr> <td>10 to 12.5</td> <td>3.2±0.5</td> <td>0.6</td> <td>5.0±0.5</td> </tr> <tr> <td>14.5 to 18</td> <td>3.2±0.5</td> <td>0.8</td> <td>7.5±0.5</td> </tr> </tbody> </table>	φD	A · B	φd	P	10 to 12.5	3.2±0.5	0.6	5.0±0.5	14.5 to 18	3.2±0.5	0.8	7.5±0.5	φD=10 to 18	<p>*1 Please consult with us about other terminal forming.</p> <p>*2 Please refer to dimensions of each series for gas escape end seal style.</p> <p>*3 Conventionally, lead forming code is used in common by (BC) for two type of the lead bent directions. We added lead forming code (BD) newly and clarified the lead bent directions. Please place an order after the choice for an appropriate lead forming code depending on condition of use.</p>	
φD	A · B	φd	P												
10 to 12.5	3.2±0.5	0.6	5.0±0.5												
14.5 to 18	3.2±0.5	0.8	7.5±0.5												

◆DIMENSION (P) [mm]

Size	Lead forming	Cutting type		Snap-in type	
		FC	C3(C5)	FM	MC
φ5		5.0	2.0	5.0	—
φ6.3		5.0	2.5	5.0	—
φ8		5.0	3.5	5.0	—
φ10		—	5.0	—	5.0
φ12.5		—	5.0	—	5.0
φ14.5		—	7.5	—	7.5
φ16		—	7.5	—	7.5
φ18		—	7.5	—	7.5

*4 Please refer to dimensions of each series for lead-wire diameter (φd).

MINIMUM ORDER QUANTITY

Please order by units of minimum order quantity.

◆SURFACE MOUNT

●Vertical



Series	Size code	Quantity (pcs)	
		Taping	Tray (pcs/box)
Alchip™ MVA/MVE/MZS MZL/MZR/MZJ MZA/MVY/MZF MZE/MZK/MLA MLF/MLE/MLK MVL/MVJ/MXB MHS/MVH/MHL MHB/MHJ/MHK MKB NPCAP™ PMF PXN/PXT/PXJ PXG/PXK/PXS PXF/PXE/PXA PXD/PXH Hybrid HXE/HXJ/HXC HXD/HXA/HXB	D55, D60, D61	2,000	—
	D73	1,500	—
	E40, E46, E55, E60, E61, E73	1,000	—
	F30	2,000	—
	F45, F46, F55, F60, F61, F73	1,000	—
	F80, H80	900	—
	F90	800	—
	FA0	750	—
	H63, H70	1,000	—
	HA0	500	—
	HCO	400	—
	J80, JA0	500	—
	JC0, JC5	400	—
	JH0	200	—
	KE0	250*1	600
	KG5	200*1	600
	KNO	150	—
	LH0	175*1	400
	LN0	125*1	400
MH0	150*1	300	
MNO	100*1	300	

*1 : Changed the packing quantity. (Size Code : KE0 to MN0)

◆RADIAL



Size	Bagged *2		Taping (pcs)	Tray (pcs) Cut type (C3, C5)	
	Long lead type (pcs/box)	Formed lead type *3 (pcs/box)			
φ 5	8L	1,000	2,000	—	
	11 to 11.5L	3,000	2,000	—	
φ 6.3	5L	1,000	2,000	—	
	8L	1,000	2,000	—	
	10.5 to 15L	2,000 (1,000) *4	2,000	—	
φ 8	20L max.	1,000	1,000	—	
φ 10	9L	2,000	800	1,500	
	11.5L	500	500	—	
	12.5L	2,000 (500) *4	3,000 (500) *4	800 (500) *4	1,500 (—) *4
	16 to 20L	2,000	2,000	800	1,500
	25L	1,000	2,000	800	1,500
	30 to 45L	1,000	1,000	—	750
φ 12.5	50L	500	1,000	—	
	16L max.	1,000	2,000	500	1,500
	20 to 25L	1,000	1,000	500	1,500
	30L	1,000	1,000	—	750
	35 to 45L	500	500	—	750
φ 14.5	50L	500	500	—	
	20L max.	500	1,000	250	500
	25L	500	500	250	500
	30 to 45L	500	500	—	500
φ 16	50L	250	250	—	
	15L, 16L	500	1,000	250	500
	20 to 25L	500	500	250	500
	30 to 35.5L	500	500	—	500
	40L	250	500	—	500
	45L	250	500	—	—
φ 18	50L	250	250	—	
	25L max.	500	500	250	500
	30 to 50L	250	250	—	500

*2 The GVA, GPD, GVD and GQB series are not compatible with bagging. They are packaged in a box.

*3 The standard bagged quantity may differ depending on the terminal type or packing style. Please contact us for details.

*4 Minimum order quantity for conductive polymer aluminum solid capacitors and conductive polymer hybrid aluminum electrolytic capacitors.

Series	Case size		Boxed (pcs) Long lead type	Case size		Boxed (pcs) Long lead type
	φ D	L		φ D	L	
Aluminum Electrolytic Capacitors GVA/GPD/GVD GQB	12.5	20 to 31.5	500	16	20 to 31.5	250
		35 to 40			35 to 40	
	14.5	20 to 31.5	300	18	20 to 31.5	200
		35 to 40			35 to 40	

◆SNAP-IN

200 pieces



◆SCREW-MOUNT TYPE

Size	Minimum order quantity (pcs)
φ 76.2 max.	20
φ 89	10
φ 100	4