

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## PACKING

### ● BULK PACKING QUANTITY(pcs) / BOX

Unit : mm

SIZE		BULK (QUANTITY)		
ØD	L	V-Bag	INNER BOX	MIDDLE BOX
3	5	500	12000	48000
4	5, 7	500	10000	40000
5	5, 7, 9, 11	500	7000	28000
6.3	5, 7, 9, 11	500	6000	24000
8	5	500	5000	20000
	9, 11.5	300	3600	14400
10	9, 12.5	200	2400	9600
	16	200	2000	8000
	20, 25	200	1600	6400
12.5	16	100	1200	4800
	20	100	1000	4000
	25	100	900	3600
16	16	100	800	3200
	20	50	600	2400
	25	50	500	2000
	31.5, 35.5	50	400	1600
18	16	50	600	2400
	20	50	500	2000
	20, 25(31.5)	50	400	1600
	35.5	50	300	1200

### ● CUTTING PACKING QUANTITY(pcs) / BOX

Unit : mm

SIZE		CUTTING (QUANTITY)		
ØD	L	V-Bag	INNER BOX	MIDDLE BOX
4	5, 7	500	9000	36000
5	5, 7, 9, 11	500	7000	28000
6.3	5, 7, 9, 11	500	6000	24000
8	5	500	5000	20000
	9, 11.5	300	3600	14400
10	9		1000	8000(16000)
	12.5		800	6400(12800)
	16		700	5600(11200)
	20		500	4000(8000)
	25		400	3200(6400)
	30		900	2700
12.5	40 ↑		900	1800
	16		400	3200(6400)
	20		300	2400(4800)
	25		250	2000(4000)
16	40 ↑		600	1200
	16		400	1200
	20		400	1200
	25, 31.5		400	1200
	35.5		400	1200
18	40 ↑		400	1200
	16		300	900
	20		300	900
	25		300	900
	31.5, 35.5		300	900
20	41		300	900
22	41		240	720
	35.5 ↓		200	600
25.4	40 ↑		200	600
	35.5 ↓		100	300
	40 ↑		100	300

\*( ) is for oversea

● Lead Forming & Cutting

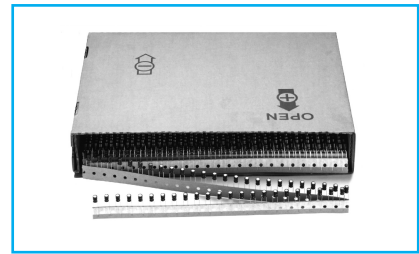
Unit : mm

Configurations	Case dia.	Shape	Code	Drawing	
				L	F
T - Type	$\varnothing D \leq 8$		TS	4.5	5.0
S - Type	$\varnothing D \geq 10$		SS	4.5	-
F - Type	$\varnothing D \leq 8$		FS	5.0	5.0
C - Type	ALL		CS	5.0	-

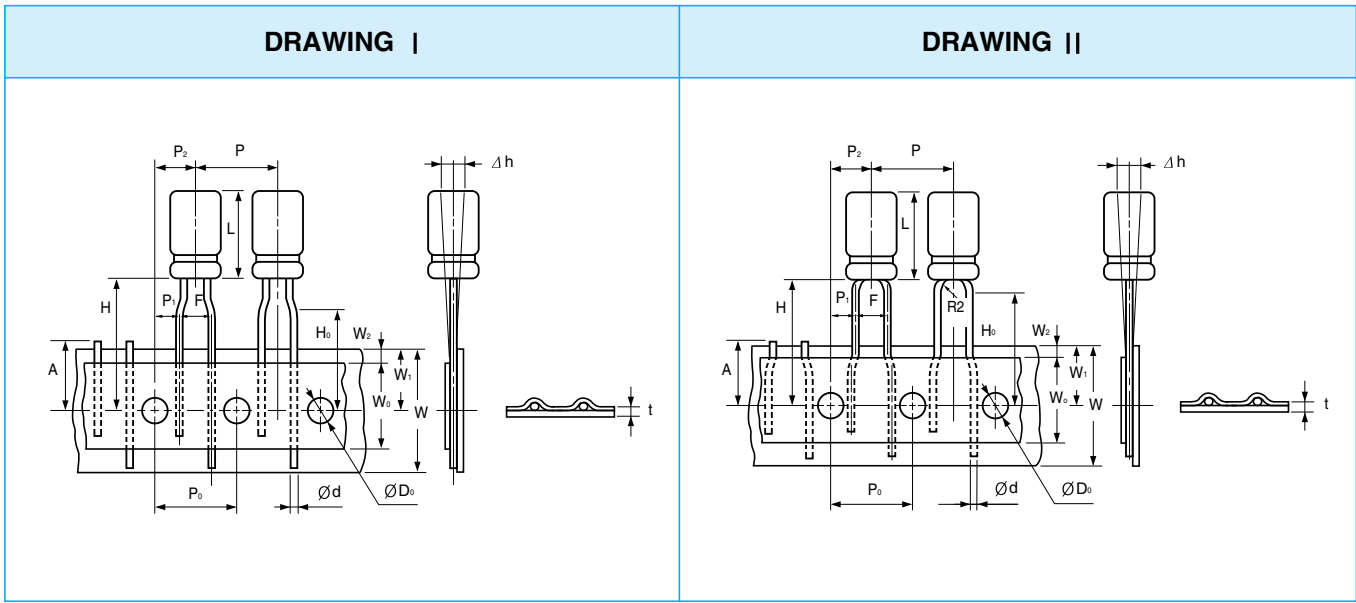
Configurations	Case dia.	Shape	Drawing		
			M	N	
	$\varnothing D \geq 8$		M	N	
D - Type	Code	DL	DR	3.0	3.2
H - Type		HL	HR	3.0	3.7
M - Type		ML	MR	6.0	2.5
Q - Type		QL	QR	6.0	1.5
J - Type		JL	JR	6.0	0.5

# TAPING

● Ammo



● Lead Taping Capacitors for Automatic Insertion



● DIMENSIONS

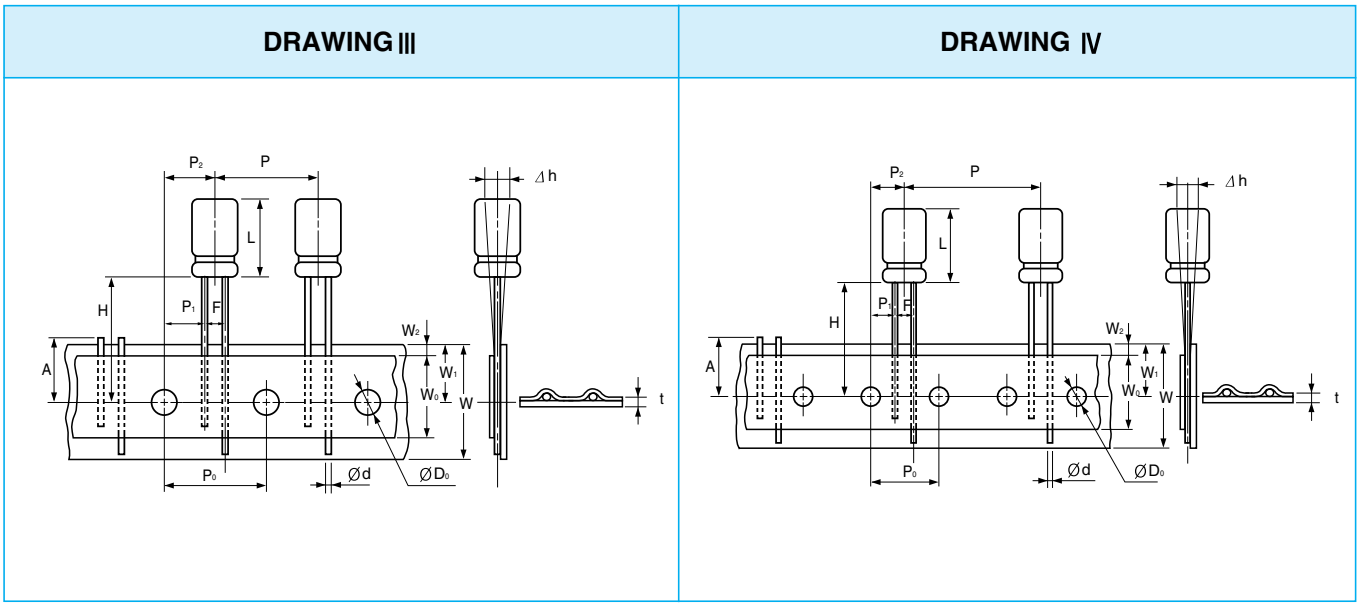
Unit : mm

Applicable Drawing No.			I (II)				III			I							
Description	Symbol	Tolerance	Ø3	Ø4	Ø5	Ø6.3	Ø8	Ø4	Ø5	Ø6.3	Ø8	Ø4	Ø5	Ø6.3	Ø8		
Case Height	L	*Note	5	5, 7	5	7~11	5	7~11	5	5, 7	5	7~11	5	7~11	5	9, 11.5	
Lead Dia.	d	±0.05	0.4	0.45	0.45	0.5	0.45	0.5	0.45	0.45	0.45	0.45	0.5	0.45	0.5	0.45	0.6
Body Pitch	P	±1.0	12.7		12.7		12.7	12.7			12.7		12.7		12.7	12.7	
Feeding Hole Pitch	P0	±0.2	12.7		12.7		12.7	12.7			12.7		12.7		12.7	12.7	
Feeding Hole Alignment	P1	±0.7	5.1		5.1		5.1	3.85			3.85		3.85		3.85	3.85	
Feeding Hole Alignment	P2	±1.0	6.35		6.35		6.35	6.35			6.35		6.35		6.35	6.35	
Lead Center Spacing	F	+0.6 -0.2	2.5		2.5		2.5	5.0			5.0		5.0		5.0	5.0	
Body Inclination	Δh	±2.0	0		0		0	0			0		0		0	0	
Tape Width	W	±0.5	18.0		18.0		18.0	18.0			18.0		18.0		18.0	18.0	
Adhesive Tape Width	W0	min.	9.5		9.5		9.5	9.5			9.5		9.5		9.5	12.5	
Feeding Hole Alignment	W1	±0.5	9.0		9.0		9.0	9.0			9.0		9.0		9.0	9.0	
Adhesive Tape Margin	W2	max.	2.0		2.0		2.0	2.0			2.0		2.0		2.0	2.0	
Length from Seating Plane	H	±0.5	17.5 (18.0)		17.5		18.5	18.5 (5, 7mmL = 17.5)			17.5		20.0		17.5	20.0	
Lead Clinch Height	H0	±0.5	16.5 (17.0)		—		—	16.5			16.5		16.5		16.5	16.5	
Feeding Hole Dia.	ØD0	±0.2	4.0		4.0		4.0	4.0			4.0		4.0		4.0	4.0	
Total Tape Thickness	t	±0.2	0.7		0.7		0.7	0.7			0.7		0.7		0.7	0.7	
Cut Lead Height	A	max.	11.0		11.0		11.0	11.0			11.0		11.0		11.0	11.0	
Taping Code	Ammo	⊕ leader	PB(PC)		PC		PE	PA			PA		PG		PA	PG	

\* Note : Refer to the drawing of each series for tolerance.

# TAPING

## ● Lead Taping Capacitors for Automatic Insertion



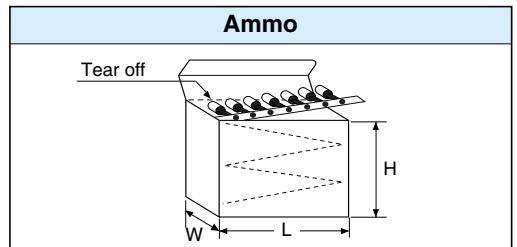
### ● DIMENSIONS

Unit : mm

Applicable Drawing No.			III	III	IV	IV	IV
Description	Symbol	Tolerance	Ø10	Ø12.5	Ø16	Ø18	Ø18
Case Height	L	max.	27.0	27.0	37.5	37.5	37.5
Lead Dia.	d	±0.05	0.6	0.6	0.8	0.8	0.8
Body Pitch	P	±1.0	12.7	15.0	25.4	30.0	30.0
Feeding Hole Pitch	P <sub>0</sub>	±0.2	12.7	15.0	12.7	15.0	15.0
Feeding Hole Alignment	P <sub>1</sub>	±0.7	3.85	5.0	3.85	3.75	3.75
Feeding Hole Alignment	P <sub>2</sub>	±1.0	6.35	7.5	6.35	7.5	7.5
Lead Center Spacing	F	+0.6 -0.2	5.0	5.0	7.5	7.5	7.5
Body Inclination	Δh	±2.0	0	0	0	0	0
Tape Width	W	±0.5	18.0	18.0	18.0	18.0	18.0
Adhesive Tape Width	W <sub>0</sub>	min.	12.5	12.5	12.5	12.5	12.5
Feeding Hole Alignment	W <sub>1</sub>	±0.5	9.0	9.0	9.0	9.0	9.0
Adhesive Tape Margin	W <sub>2</sub>	max.	2.0	2.0	2.0	2.0	2.0
Length from Seating Plane	H	±0.5	18.5	18.5	18.5	18.5	18.5
Feeding Hole Dia.	ØD <sub>0</sub>	±0.2	4.0	4.0	4.0	4.0	4.0
Total Tape Thickness	t	±0.2	0.7	0.7	0.7	0.7	0.7
Cut Lead Height	A	max.	11.0	11.0	11.0	11.0	11.0
Taping Code	Ammo	⊕ leader	PA	PH	PL	PA	PA

### ● PACKAGING Q'ty(pcs.)/Box

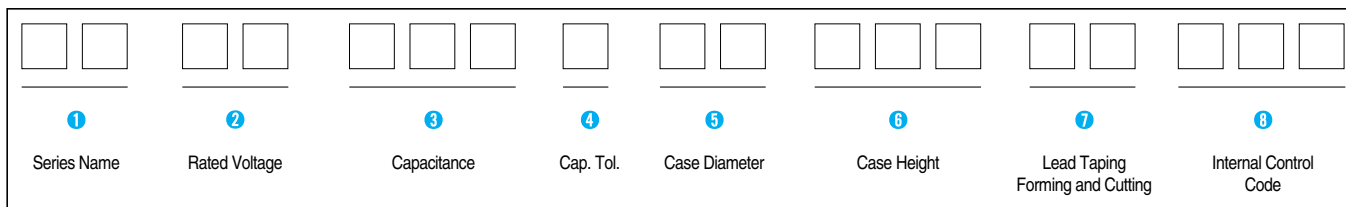
Unit : mm



Size		Ammo			
ØD	Case Height	L	H	W	Q'ty
3	5	332	230	42	3000
4	5, 7				2500
5	5, 7	332	230	49	2000
	9, 11				1500
6.3	5, 7	332	230	42	1500
	9, 11				
8	5	332	230	42	1000
	9, 11.5				
10	9, 12.5, 16	332	190	51	500
	20, 25				
12.5	16, 20, 25	342	240	62	400
16	16, 20, 25	342	240	62	250
	31.5, 35.5				
18	16, 20, 25	342	240	62	200
	31.5, 35.5				

## PART NUMBER SYSTEM

### ● Part Number System



**1** Series Name  
See page 4~5.

**2** Rated Working Voltage

<b>WV</b>	<b>2.5</b>	<b>4</b>	<b>6.3</b>	<b>10</b>	<b>16</b>	<b>20</b>	<b>25</b>
<b>Code</b>	0E	0G	0J	1A	1C	1D	1E
<b>WV</b>	<b>35</b>	<b>40</b>	<b>50</b>	<b>63</b>	<b>80</b>	<b>100</b>	<b>160</b>
<b>Code</b>	1V	1G	1H	1J	1K	2A	2C
<b>WV</b>	<b>200</b>	<b>250</b>	<b>315</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
<b>Code</b>	2D	2E	2F	2V	2G	2W	2H

**3** Capacitance

ex) 0.47 $\mu$ F    474  
 4.7 $\mu$ F        475  
 47 $\mu$ F          476  
 470 $\mu$ F        477  
 4700 $\mu$ F       478  
 47000 $\mu$ F     479

**4** Capacitance Tolerance

<b>Tolerance (%)</b>	$\pm 10$	$\pm 20$	$-10$ $+20$	$-10$ $+30$	$-10$ $+50$
<b>Code</b>	K	M	V	Q	T

**5** Case Diameter

ex)  $\varnothing 3$         03                     $\varnothing 12.5$     12  
 $\varnothing 4$         04                     $\varnothing 14.5$     14  
 $\varnothing 5$         05                     $\varnothing 16$        16  
 $\varnothing 6.3$       6L                     $\varnothing 18$        18  
 $\varnothing 8$         08                     $\varnothing 22$        22  
 $\varnothing 10$        10                     $\varnothing 25.4$     25

**6** Case Height  
 ex) 5mm    005  
      11mm   011  
      12.5mm 12M  
      20mm   020  
      31.5mm 31M  
      35.5mm 35M

**7** Lead Taping, Forming and Cutting  
 See pages 71 ~ 73