

RADIAL TYPE

SK Series

Standard, For General Purposes

JAMICON®

LK ← SK → SM

- SK series has high value of CV for general purposes.



● SPECIFICATION

Item	Characteristic														
Operation Temperature Range	-40 ~ +85°C							-25 ~ +85°C							
Rated Working Voltage	6.3 ~ 100VDC							160 ~ 450VDC							
Capacitance Tolerance (120Hz 20°C)	±20%(M)														
Leakage Current (20°C)	6.3~100 VDC I ≤ 0.01CV or 4 (μA)							160~450 VDC I ≤ 0.03CV + 40 (μA)max							
	*Whichever is greater after 3 minutes I : Leakage Current(μA) C : Rated Capacitance(μF) V : Working Voltage(V)														
Surge Voltage (20°C)	W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
	S.V.	8	13	20	32	44	63	79	125	200	250	300	400	450	500
Dissipation Factor (tan δ) (120Hz 20°C)	Add 0.02 per 1000 μF for more than 1000 μF														
	W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
Low Temperature Stability	Impedance ratio at 120Hz														
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
	-25°C / +20°C	4	3	2	2	2	2	2	2	3	6	15			
	-40°C / +20°C	8	6	4	3	3	3	3	3	6	6				
Load Life	After 2000 hours application of W.V. at +85°C, the capacitor shall meet the following limits.														
	Capacitance Change	≤ ±20% of initial value													
	Dissipation Factor	≤ 150% of initial specified value													
	Leakage current	≤ initial specified value													
Shelf Life	At +85°C no voltage application after 1000 hours the capacitor shall meet the following limits. (with voltage treatment)														
	Capacitance Change	≤ ±20% of initial value													
	Dissipation Factor	≤ 200% of initial specified value													
	Leakage current	≤ 200% of initial specified value													

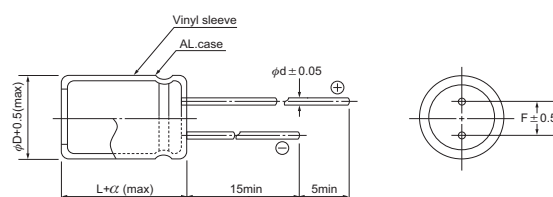
● DIMENSIONS (mm)

φD	5	6.3	8	10	12.5	16	18	22	25
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0	12.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8	1.0	1.0
α	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0

● RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	65	75	85
Multiplier	1.25	1.14	1.00

Frequency(Hz)	60	120	1K	≥10K
W.V.	Multiplier			
6.3~25V	0.85	1.00	1.10	1.20
35~100V	0.80	1.00	1.15	1.25
160~250V	0.75	1.00	1.25	1.40
350~450V	0.70	1.00	1.30	1.50



● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
Max ripple current : mA(rms) 85°C 120Hz

μF	V(Code)		6.3 (0J)		10 (1A)		16 (1C)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
47	470						5x11	110
100	101		5x11	140	5x11	150	6.3x11	180
220	221		5x11	200	5x11	220	6.3x11	270
			6.3x11	230	6.3x11	250	8x11.5	320
330	331		6.3x11	290	6.3x11	310	8x11.5	390
			8x11.5	330	8x11.5	360	10x12.5	410
470	471		6.3x11	340	6.3x11	370	8x11.5	470
			8x11.5	400	8x11.5	430	10x12.5	490
1000	102		8x11.5	580	10x12.5	660	10x16	800
			10x12.5	610	10x16	730	10x20	880
2200	222		10x16	960	10x20	1140	12.5x20	1310
			10x20	1060	12.5x20	1210	12.5x25	1440
3300	332		10x20	1250	12.5x20	1420	12.5x25	1680
			12.5x20	1330	12.5x25	1560	16x25	1690
4700	472		12.5x20	1510	12.5x25	1760	16x25	1880
			12.5x25	1660	16x25	1770	16x31.5	2080
6800	682		12.5x25	1870	16x25	1980	16x31.5	2310
			16x25	1880	16x31.5	2190	18x35.5	2600
8200	822		16x25	1980	16x31.5	2290	16x35.5	2530
			16x31.5	2190	18x35.5	2580	18x40	2850
10000	103		16x25	2080	16x35.5	2520	18x35.5	2800
			16x31.5	2300	18x35.5	2690	18x40	2960
15000	153		16x35.5	2650	18x35.5	2920	22x40	3560
			18x35.5	2830	18x40	3080	22x50	3930
22000	223		18x40	3200	22x50	4040	25x50	4450

μF	V(Code)		25 (1E)		35 (1V)		50 (1H)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
0.47	R47					→	5x11	14
1	010					→	5x11	20
2.2	2R2					→	5x11	30
3.3	3R3					→	5x11	37
4.7	4R7					→	5x11	44
10	100		5x11	55	5x11	60	5x11	65
22	220		5x11	80	5x11	90	5x11	95
			5x11	100	5x11	110	5x11	120
33	330		6.3x11	110	6.3x11	120	6.3x11	130
			5x11	120	5x11	130	6.3x11	160
47	470		6.3x11	130	6.3x11	150	8x11.5	190
			6.3x11	200	6.3x11	210	8x11.5	270
100	101		8x11.5	230	8x11.5	250	10x12.5	290
			8x11.5	340	8x11.5	370	10x12.5	430
220	221		10x12.5	360	10x12.5	390	10x16	470
			8x11.5	420	10x12.5	480	10x16	580
330	331		10x12.5	440	10x16	530	10x20	640
			10x12.5	530	10x16	630	10x20	720
470	471		10x16	580	10x20	690	12.5x20	810
			10x20	940	12.5x20	1080	12.5x25	1310
1000	102		12.5x20	1000	12.5x25	1190	16x25	1310
			12.5x25	1530	16x25	1650	16x35.5	2070
2200	222		16x25	1540	16x31.5	1820	18x35.5	2210
			16x25	1780	16x35.5	2200	18x35.5	2510
3300	332		16x31.5	1970	18x35.5	2350	18x40	2650
			16x31.5	2170	18x35.5	2570	22x45	3380
4700	472		18x35.5	2450	18x40	2710		
			18x35.5	2700	22x45	3490	25x50	4110
6800	682		18x40	2840				
8200	822		22x45	3480	22x50	3780		
10000	103		22x50	3760	25x50	4170		
15000	153		25x50	4320				

All blank voltage on sleeve marking is the same voltage as " → "point to.

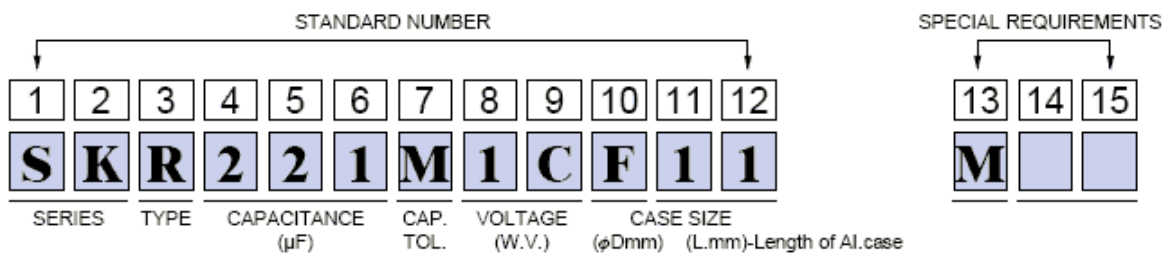
● CASE SIZE & MAX RIPPLE CURRENT Case size : D x L (mm)
Max ripple current : mA(rms) 85°C 120Hz

μF	V(Code)		63 (1J)		100 (2A)	
	Code	Item	DxL	R.C.	DxL	R.C.
0.47	R47			→	5x11	16
1	010			→	5x11	23
2.2	2R2			→	5x11	34
3.3	3R3			→	5x11	42
4.7	4R7			→	5x11	50
10	100		5x11	65	6.3x11	80
22	220		5x11	95	6.3x11	120
			6.3x11	110	8x11.5	140
33	330		6.3x11	130	8x11.5	170
			8x11.5	160	10x12.5	180
47	470		6.3x11	160	10x12.5	220
			8x11.5	190	10x16	240
100	101		10x12.5	290	10x20	390
			10x16	320	12.5x20	420
220	221		10x16	470	12.5x25	680
			10x20	520	16x25	690
330	331		10x20	640	12.5x25	840
			12.5x20	680	16x25	840
470	471		12.5x20	810	16x25	1010
			12.5x25	900	16x31.5	1110
1000	102		16x25	1310	18x40	1930
			16x31.5	1450	22x35	2030
2200	222		22x35	2460	25x50	3390
3300	332		22x50	3270		
4700	472		25x50	3800		

All blank voltage on sleeve marking is the same voltage as" → "point to.

μF	V(Code)		160 (2C)		200 (2D)		250 (2E)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
0.47	R47		6.3x11	13	6.3x11	14	6.3x11	15
1	010		6.3x11	19	6.3x11	20	6.3x11	22
2.2	2R2		6.3x11	28	6.3x11	30	6.3x11	33
3.3	3R3		6.3x11	35	6.3x11	37	8x11.5	47
4.7	4R7		6.3x11	41	8x11.5	50	8x11.5	55
10	100		8x11.5	70	10x12.5	80	10x16	95
22	220		10x16	120	10x20	140	12.5x20	170
33	330		10x20	160	12.5x20	190	12.5x20	210
47	470		12.5x20	210	12.5x20	230	12.5x25	270
100	101		12.5x25	340	16x25	360	16x31.5	440
220	221		16x35.5	590	18x40	710		
			22x30	650	22x30	700	22x35	810
330	331		18x40	810				
			22x30	800	22x40	970	22x45	1110
470	471		22x40	1080	22x45	1220	25x45	1430
560	561		22x45	1240	22x50	1400	25x50	1630
680	681		22x50	1430	25x50	1650		
820	821		25x50	1690				

μF	V(Code)		350 (2V)		400 (2G)		450 (2W)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
0.47	R47		8x11.5	15	8x11.5	16	8x11.5	15
1	010		8x11.5	22	8x11.5	23	8x11.5	22
2.2	2R2		8x11.5	33	8x11.5	34	10x12.5	35
3.3	3R3		10x12.5	43	10x12.5	44	10x16	47
4.7	4R7		10x12.5	50	10x16	60	10x18	60
10	100		10x20	90	12.5x20	100	12.5x20	95
22	220		12.5x20	140	12.5x25	160	16x25	160
33	330		12.5x25	190	16x25	200	16x31.5	220
47	470		16x25	230	16x31.5	270	18x35.5	290
					22x30	310		
100	101		18x35.5	420	18x35.5	440	18x35.5	420
			22x35	470	22x40	520		
150	151		22x40	610	25x50	750		
220	221		22x50	820				



Series		Code	Type	Description	CAP (μF)	Code	Tolerance (%)	Code	Voltage (W.V.)	Code	Diameter (φ)	Code	Length (L)	Code	Code	Description
PS	TH	R		Bulk	0.1	OR1	+10	K	4	0G	3	A	11	11	W	Without Sleeve
PT	TX				0.22	R22	-10		6.3	0J	3.8	S	11.5	BB		
CS	WB	P		Taping (Ammo Pack)	0.33	R33	+15	L	10	1A	4	C	12.5	BC	1~9	Customer Assign
CR	FS				0.47	R47	-15		13	1P	5	D	31.5	DB	A~Z	
CT	UK	C	Radial	Lead Cut	1	010	+20	M	16	1C	6	W	35.5	DF	a~	Brand
CH	NC				2.2	2R2	-20		20	1D	6.3	E	100	1H		
CL	LP	F		Lead Forming Cut	3.3	3R3	+100	P	25	1E	7	Y	110	1A		
CF	HP				4.7	4R7	-0		35	1V	8	F	115	1K		
SV	LS	B		Lead Forming Only	10	100	+30	Q	40	1G	10	G	120	1B		
ST	HS				22	220	-10		50	1H	12	H	121	1M		
NT	LT	Y		Lead Snap in	33	330	+20	R	63	1J	12.5	I	130	1C		
SS	HT				47	470	-0		80	1K	13	J	131	1P		
SH	HV	W		Snap in Terminal	100	101	+50	T	100	2A	16	K	140	1D		
SL	KP				220	221	-10		125	2B	18	L	144	1Q		
NS	RP	G	Lug	G Type Terminal	330	331	+75	U	160	2C	20	M	150	1E		
SK					470	471	-10		180	2M	22	N	155	1N		
SM		V		V Type Terminal	1000	102	+20	V	200	2D	25	O	157	1R		
TK					2200	222	-10		250	2E	30	P	160	1F		
TM		S	Screw	Screw Terminal Type	3300	332	+20	H	315	2F	35	Q	170	1G		
NK					4700	472	-5		330	2U	40	R	180	1I		
LK		M	Chip	Surface Mount Type	10000	103	+30	F	350	2V	51	V	190	1J		
WL					22000	223	-0		400	2G	64	1	196	1S		
WG		E	Chip	Horizontal Molded	33000	333	+100	W	450	2W	77	2	215	1L		
TL					47000	473	-10		500	2H	90	3	236	1T		

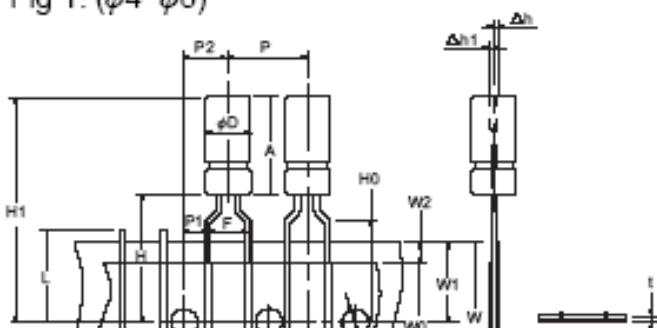
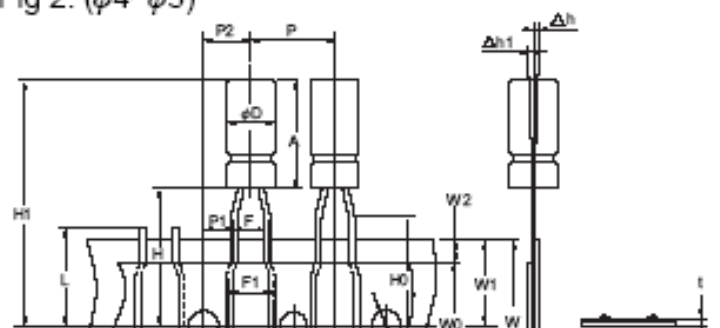
SPECIFICATION

Lead taping is designed for automatic insertion equipment. Capacitor with case size of 18mm x 35.5mm or smaller are available in taping type.

DIMENSIONS ($\phi 4 \sim \phi 10$)

(mm)

Item	Symbol	Case Size												Tolerance	Remark		
		4x5	5x5	6.3x5	8x5	4x7	5x7	6.3x7	8x7	5x11	6.3x11	8x11.5	10x12.5			10x16	10x18
Lead wire diameter	d	0.45				0.5				0.6				± 0.05			
Body height	A	6.0			8.0			12.5			13	14	17.5	19.5	21.5	max	
Intervals of bodies	P	12.7												± 1.0			
Intervals of punched holes	P ₀	12.7												± 0.2			
Distance between holes and lead wire	P ₁	3.85												± 0.7	Fig 1. Fig 4.		
		5.35	5.1	5.1			5.35	5.1	5.1		5.1						Fig 2.
		5.6	5.35	5.1	5.1	5.6	5.35	5.1	4.6	5.35	5.1	4.6					Fig 3.
Distance between holes and bodies	P ₂	6.35												± 1.0			
Distance between lead and lead	F	5.0												$+0.8$ -0.2	Fig 1. Fig 4.		
		2.0	2.5	2.5			2.0	2.5	2.5		2.5						Fig 2. F ₁ :5.0 ^{+0.5} _{-1.0}
		1.5	2.0	2.5	2.5	1.5	2.0	2.5	3.5	2.0	2.5	3.5					Fig 3. F ₁ :5.0 ^{+0.5} _{-1.0}
Base tape width	W	18.0												± 0.5			
Adhesive tape width	W ₀	12.5												min			
Deviation between holes and base tape	W ₁	9.0												± 0.5			
Deviation between adhesive and base tape	W ₂	1.5												max			
Distance between body bottom and tape center	H	17.5				18.5				20.0	18.5				± 0.5	Fig 1. Fig 4.	
		17.5				18.5				18.5						Fig 2. Fig 3.	
Lead wire clinched height	H ₀	16.0												± 0.5			
Distance between body top and tape center	H ₁	24.5			27.5			32.5			33.0	36.0	38.0	41.0	max		
Punched hole diameter	D ₀	4.0												± 0.3			
Length of not good lead slit	L	11.0												max			
Base and adhesive tape thickness	t	0.6												± 0.3			
Deviation of body alignment	Δh	0												± 2.0			
Deviation of body alignment	Δh_1	0												± 1.0			

Fig 1. ($\phi 4 \sim \phi 8$)Fig 2. ($\phi 4 \sim \phi 5$)

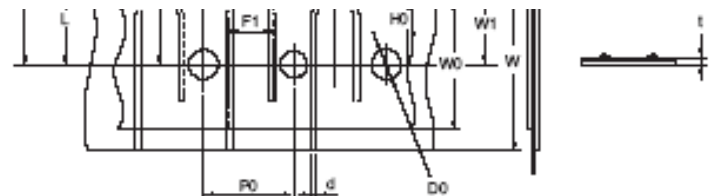
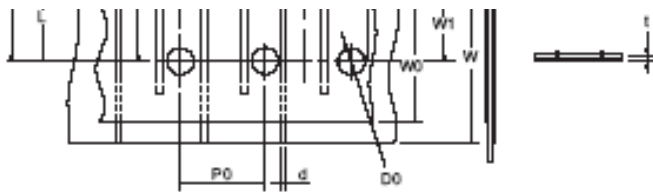


Fig 3. ($\phi 4 \sim \phi 8$)

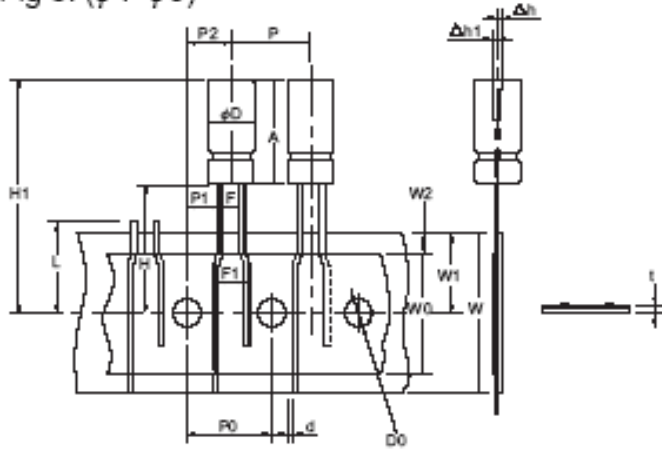
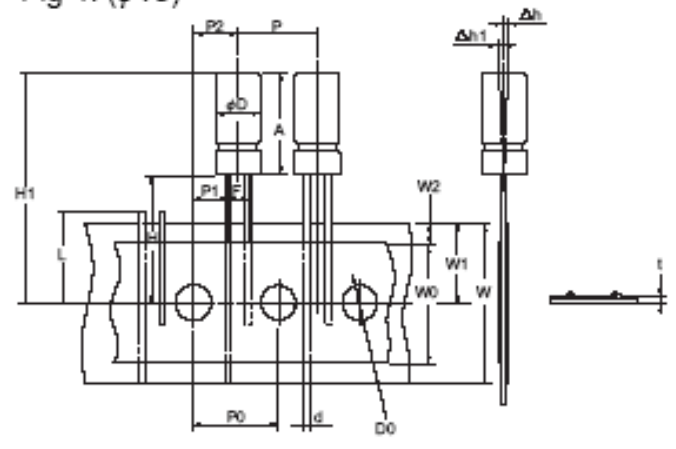


Fig 4. ($\phi 10$)



DIMENSIONS ($\phi 13 \sim \phi 18$)

(mm)

Item	Symbol	Case Size							Tolerance	Remark
		12.5 x 20	12.5 x 25	12.5 x 30	16 x 25	16 x 31.5	16 x 35.5	18 x 35.5		
Lead wire diameter	d	0.6			0.8				± 0.05	
Body height	A	21.5	26.5	31.5	26.5	33	37.0	37.0	max	
Intervals of bodies	P	15.0			30.0				± 1.0	Fig 5. Fig 6.
Intervals of punched holes	P ₀	15.0							± 0.2	
Distance between holes and lead wire	P ₁	5.0			3.75				± 0.7	
Distance between holes and bodies	P ₂	7.5							± 1.0	
Distance between lead and lead	F	5.0			7.5				+0.8 -0.2	
Base tape width	W	18.0							± 0.5	
Adhesive tape width	W ₀	15.0							min	
Deviation between holes and base tape	W ₁	9.0							± 0.5	
Deviation between adhesive and base tape	W ₂	1.5							max	
Distance between body bottom and tape center	H	16.5			18.5				± 0.5	Fig 5. Fig 6.
Distance between body top and tape center	H ₁	40.5	45.5	50.5	46.5	53.5	56.5	56.5	max	
Punched hole diameter	D ₀	4.0							± 0.3	
Length of not good lead slit	L	11.0							max	
Base and adhesive tape thickness	t	0.6							± 0.3	
Deviation of body alignment	Δh	0							± 2.0	

Deviation of body alignment	Δh	0	± 2.0
Deviation of body alignment	$\Delta h1$	0	± 1.0

Fig 5. ($\phi 13$)

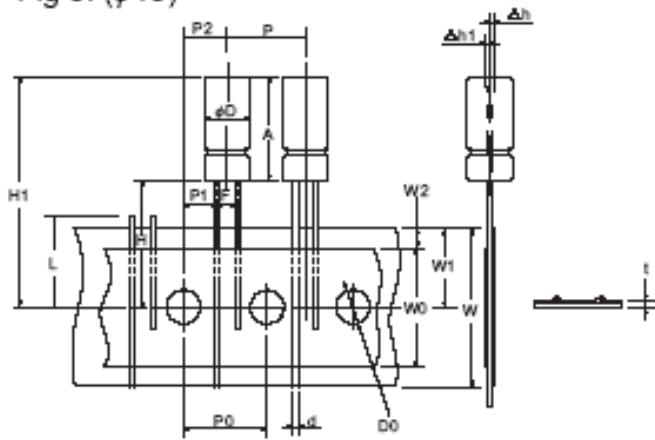
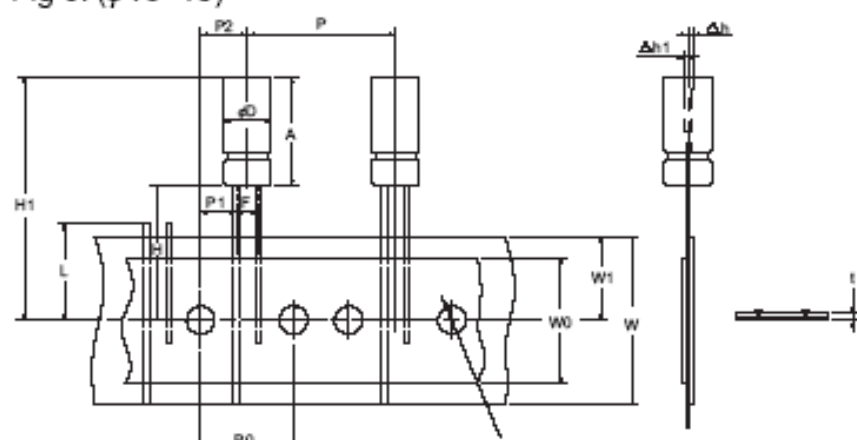


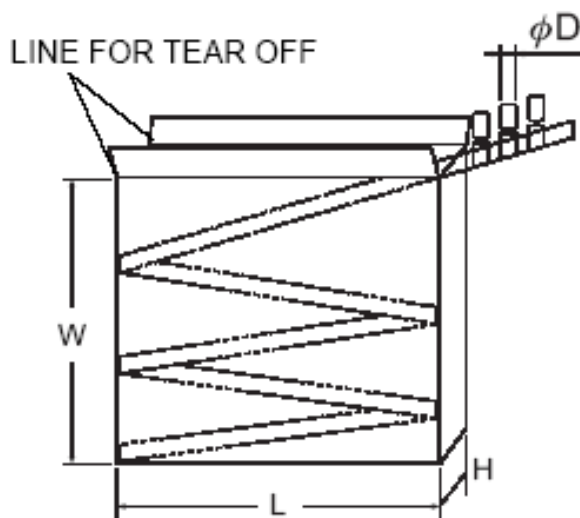
Fig 6. ($\phi 16\sim 18$)



PACKING (SYMBOL : P)

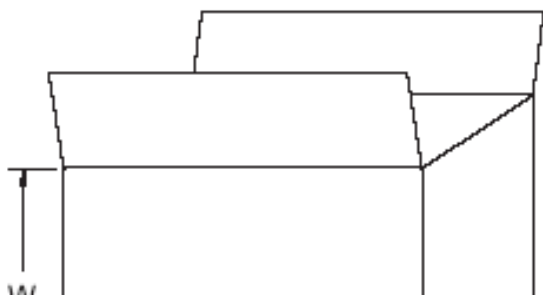
Available for various automatic equipment. Choosing the ordinal the polarity of capacitor's lead depends on customer's request.

INNER BOX :

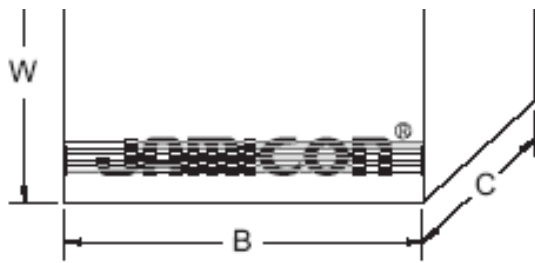


ϕD (mm)	$W \pm 5$ (mm)	$L \pm 5$ (mm)	$H \pm 5$ (mm)	Quantity(Pcs)
4	175	335	45	2,000
5	235	335	50	2,000
6.3	280	335	50	2,000
8	235	335	50	1,000
10(L \leq 16)	295	320	50	800
10(L \leq 20)	295	320	55	800
12.5(L \leq 20)	295	320	55	500
12.5(L \leq 25)	295	320	60	500
12.5(L \leq 30)	295	320	70	500
16(L \leq 25)	295	320	60	300
16(L \leq 31.5)	295	320	70	300
16(L \leq 35.5)	300	320	70	300
18(L \leq 35.5)	300	320	70	243

PACKING CARTON :



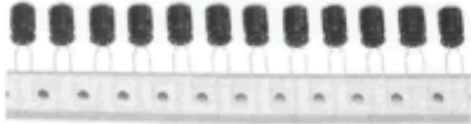
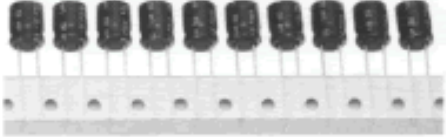
ϕD (mm)	$A \pm 5$ (mm)	$B \pm 5$ (mm)	$C \pm 5$ (mm)	Inner Box	Quantity(Pcs)
4	240	355	185	5	10,000
5	270	355	250	5	10,000
6.3	270	355	300	5	10,000
8	270	355	250	5	5,000
10(L \leq 16)	290	345	320	5	4,000
10(L \leq 20)	315	345	320	5	4,000
12.5(L \leq 20)	315	345	320	4	2,000
12.5(L \leq 25)	340	345	320	4	2,000



12.5(L≤20)	315	345	320	4	2,000
12.5(L≤25)	340	345	320	4	2,000
12.5(L≤30)	370	345	320	4	2,000
16(L≤25)	340	345	320	4	1,200
16(L≤31.5)	370	345	320	4	1,200
16(L≤35.5)	385	345	320	4	1,200
18(L≤35.5)	385	345	320	4	972

Lead Style & taping

Item List		Code	Lead Diameter (mm)	Case Size DxL(mm)	Range	Dimensions
Lead Style	Lead Cut	C	0.5~0.8	5 x 11 } 18 x 40	$\phi 5 \sim \phi 18$	
	Lead Forming Cut	F	0.5~0.6	5 x 11 } 8 x 11.5	$\phi 5 \sim \phi 8$	
	Snap-in	Y	0.5~0.8	5 x 11	$\phi 5 \sim \phi 8$	
18 x 40				$\phi 10 \sim \phi 18$		
						$\phi 4 \sim \phi 8$: See Fig 1. (page 8)

<p>Lead Taping</p>	<p>P</p>	<p>0.45~0.8</p>	<p>4 x 5 $\}$ 18 x 35.5</p>	<p>$\leq \phi 18$</p>	<p>$\phi 4 \sim \phi 8$: See Fig 1. (page 8)</p>  <p>$\phi 10$: See Fig 4. (page 9)</p> 
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