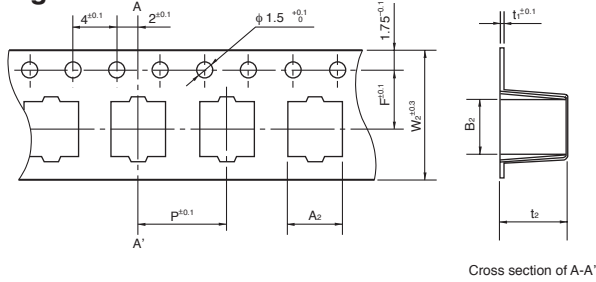
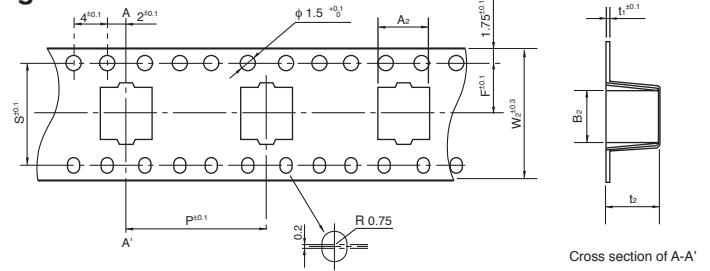
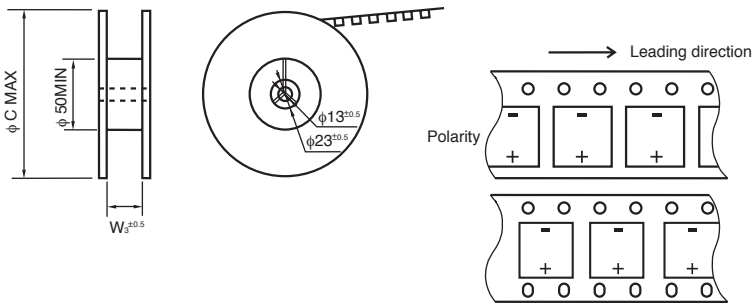


object : Chip type capacitors
◆ TAPING DIMENSIONS
Fig.1

Fig.2


Size	W ₂ (mm)	A ₂ (mm)	B ₂ (mm)	P (mm)	t ₂ (mm)	F (mm)	t ₁ (mm)	S (mm)	Applicable
φ 4×4.5	12.0	4.7	4.7	8	4.9	5.5	0.4	-	Fig.1
φ 5×4.5	12.0	5.7	5.7	12	4.9	5.5	0.4	-	
φ 6.3×4.5	16.0	7.0	7.0	12	5.0	7.5	0.4	-	
φ 3×5.5	12.0	3.6	3.6	8	5.7	5.5	0.4	-	
φ 4×5.5	12.0	4.7	4.7	8	5.7	5.5	0.4	-	
φ 5×5.5	12.0	5.7	5.7	12	5.7	5.5	0.4	-	
φ 6.3×5.5	16.0	7.0	7.0	12	5.7	7.5	0.4	-	
φ 4×6.1	12.0	4.7	4.7	8	6.2	5.5	0.4	-	
φ 5×6.1	12.0	5.7	5.7	12	6.2	5.5	0.4	-	
φ 6.3×6.1	16.0	7.0	7.0	12	6.2	7.5	0.4	-	
φ 6.3×8	16.0	7.0	7.0	12	8.2	7.5	0.4	-	
φ 8×6.5	16.0	8.7	8.7	12	6.8	7.5	0.4	-	
φ 8×10.5	24.0	8.7	8.7	16	11.0	11.5	0.4	-	
φ 10×10.5	24.0	10.7	10.7	16	11.0	11.5	0.4	-	
φ 4×7	16.0	4.7	4.7	8	7.4	7.5	0.5	-	
φ 5×7	16.0	5.7	5.7	12	7.2	7.5	0.5	-	
φ 6.3×7	16.0	7.0	7.0	12	7.3	7.5	0.4	-	
φ 12.5×13.5	32.0	14.0	14.0	24	14.0	14.2	0.5	28.4	Fig.2
φ 12.5×16	32.0	14.0	14.0	24	16.3	14.2	0.5	28.4	
φ 16×16.5	44.0	17.5	17.5	28	16.8	20.2	0.5	40.4	
φ 16×21.5	44.0	17.5	17.5	28	21.8	20.2	0.5	40.4	
φ 18×16.5	44.0	19.5	19.5	32	16.8	20.2	0.5	40.4	
φ 18×21.5	44.0	19.5	19.5	32	21.8	20.2	0.5	40.4	

◆ TAPING REEL AND PACKING QUANTITY



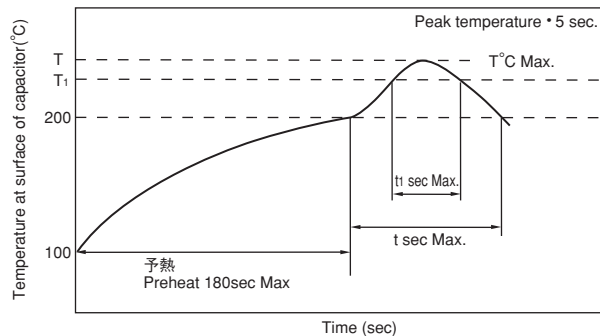
Reusable reels are available according to your request.
Please consult in regard to establishing supply and withdrawal system.

Size	W3 (mm)	φ C (mm)	Quantity/reel	Standard Shipping Carton Quantity
φ 3×5.5	14	382	2,000	10,000
φ 4×4.5,5.5,6.1	14	382	2,000	10,000
φ 5×4.5,5.5,6.1	14	382	1,000	5,000
φ 6.3×4.5,5.5,6.1	18	382	1,000	5,000
φ 6.3×8	18	382	900	4,500
φ 4×7	18	382	1,500	7,500
φ 5×7	18	382	1,000	5,000
φ 6.3×7	18	382	1,000	5,000
φ 8×6.5	18	382	1,000	5,000
φ 8×10.5	26	382	500	2,000
φ 10×10.5	26	382	500	2,000
φ 12.5×13.5	34	332	200	600
φ 12.5×16	34	332	150	450
φ16×16.5,φ18×16.5	46	332	125	250
φ16×21.5,φ18×21.5	46	332	75	150

◆ LEAD FREE TYPE REFLOW SOLDERING CONDITION

● Size φ 3-φ 10

- 1) Temperature at surface of capacitor shall not exceed T°C.
- 2) Period that temperature at surface of capacitor becomes more than 200°C and T₁°C shall not exceed t and t₁ seconds, respectively.
- 3) Preheat shall be made at 100°C~200°C and for maximum 180 seconds.



Series	Size	T(°C)	T ₁ (°C)	t(sec)	t ₁ (sec)	Reflow cycle
SEV NSEV SKV NSKV SGV TFV SZV TZV TXV SXV SSV	φ 3-φ 6.3	250	230	90	40	1
	φ 8	240	230	90	30	1
	φ 10	235	230	60	30	1
SJV SLV	φ 4-φ 6.3	240	220	60	40	1
JEV JKV JGV JZV	φ 4-φ 6.3	260	217	-	60	2
	φ 8, φ 10	250	217	-	60	2

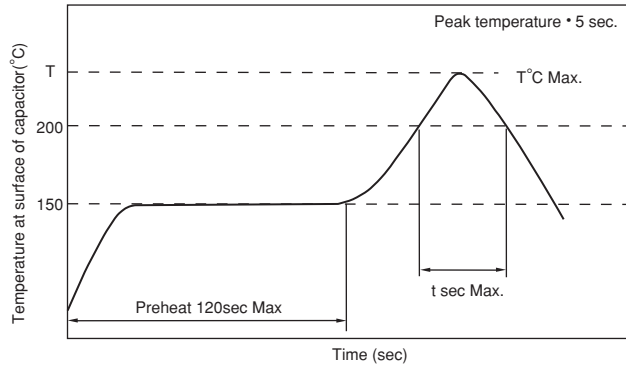
*Please contact us if the condition is over the maximum.

◆ LEAD FREE TYPE REFLOW SOLDERING CONDITION
● Size $\phi 12.5 \sim \phi 18 \text{mm}$

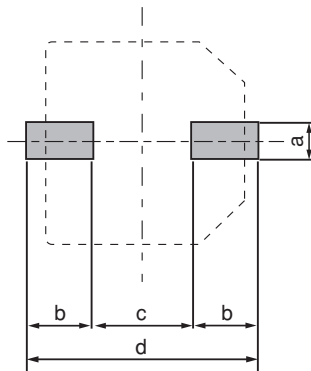
- 1) Temperature at surface of capacitor shall not exceed $T^{\circ}\text{C}$.
- 2) Period that temperature at surface of capacitor becomes more than 200°C shall not exceed t seconds.
- 3) Preheat shall be made at maximum 150°C and for maximum 120 seconds.
- 4) Reflow soldering process shall be 1 cycle.

Series	Size	$T(^{\circ}\text{C})$	$t(\text{sec})$
SEV SGV	$\phi 12.5 \sim \phi 18$	215	20

*Temperature at terminal of capacitor shall not exceed 230°C .



*Please contact us if the condition is over the maximum.

◆ RECOMMENDED LAND SIZE


サイズ Size	a	b	c	d
$\phi 3$	1.6	2.2	0.8	5.2
$\phi 4$	1.6	2.6	1.0	6.2
$\phi 5$	1.6	3.0	1.4	7.4
$\phi 6.3$	1.6	3.5	2.1	9.1
$\phi 8 \times 6.5$	1.6	4.5	2.1	11.1
$\phi 8 \times 10.5$	2.2	4.1	3.0	11.2
$\phi 10 \times 10.5$	2.2	4.3	4.5	13.1
$\phi 12.5$	2.5	6.0	5.0	17
$\phi 16$	3	6.5	8.0	21
$\phi 18$	3	7.5	8.0	23

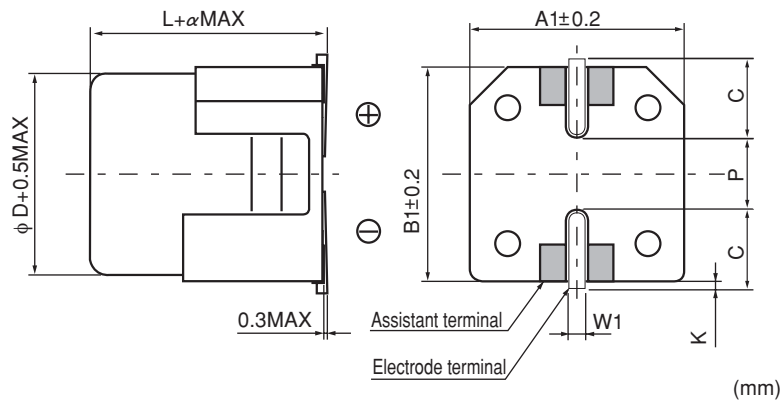
◆ Vibration proof packages with the supporting terminal

- For chip Aluminum electrolytic capacitors more than case size $\phi 8$, vibration proof packages supports.

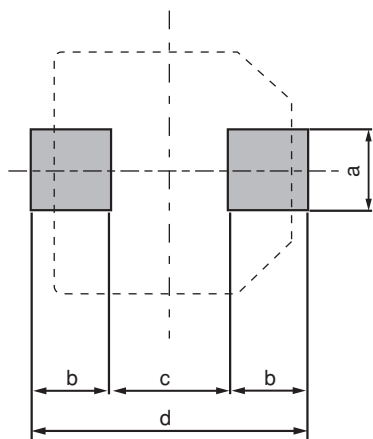

◆ PART NUMBER

□□□ /
 □□□ /
 □□□□□ /
 □ /
 □□□ /
 VB /
 D×L

Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Vibration proof package No. Case Size

◆ DIMENSIONS


Size	A1	B1	C	W1	P	K	α
$\phi 8 \times 6.5$	8.3	8.3	3.4	0.65 ± 0.15	2.2	0.5 ± 0.4	0.5
$\phi 8 \times 10.5$	8.3	8.3	2.9	0.9 ± 0.2	3.1	0.5 ± 0.4	0.5
$\phi 10 \times 10.5$	10.3	10.3	3.2	0.9 ± 0.2	4.5	0.5 ± 0.4	0.5
$\phi 12.5 \times 13.5$	13	13	4.9	1.1 ± 0.3	4.5	0.7 ± 0.4	1
$\phi 12.5 \times 16$	13	13	4.9	1.1 ± 0.3	4.5	0.7 ± 0.4	1
$\phi 16 \times 16.5$	17	17	6	1.1 ± 0.3	6.8	0.7 ± 0.4	1
$\phi 16 \times 21.5$	17	17	6	1.1 ± 0.3	6.8	0.7 ± 0.4	1
$\phi 18 \times 16.5$	19	19	7	1.1 ± 0.3	6.8	0.7 ± 0.4	1
$\phi 18 \times 21.5$	19	19	7	1.1 ± 0.3	6.8	0.7 ± 0.4	1

◆ RECOMMENDED LAND SIZE


Size	a	b	c	d
$\phi 8 \times 6.5$	4.2	4.6	2.1	11.3
$\phi 8 \times 10.5$	4.2	4.5	2.5	11.5
$\phi 10 \times 10.5$	4.2	4.8	3.9	13.5
$\phi 12.5$	6.4	6.2	3.9	16.3
$\phi 16$	7	7.8	4.7	20.3
$\phi 18$	7	8.8	4.7	22.3