

◆LEAD WIRE TYPE PART NUMBER

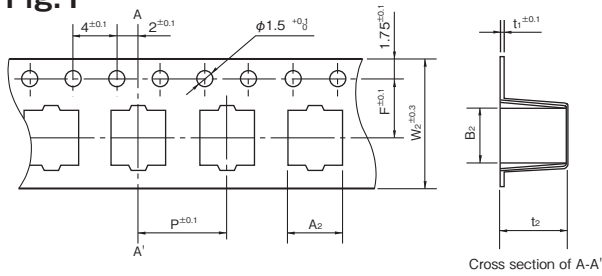
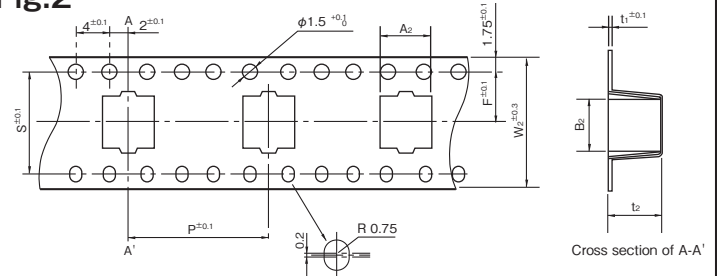
□□□ Rated Voltage		□□□□ Series		□□□□□ Capacitance		□ Capacitance Tolerance		□□□ Option		□□ Lead Forming		D×L Case Size	
↑		↑		↑		↑		↑		↑		↑	
Rated Voltage(V)	Code	Cap.(μF)	Code	Tolerance	Code	EFC etc	TA, KC, CA etc	5×11 10×12.5 12.5×40					
6.3	6.3	0.1	0R1	±20%	M								
10	10	0.47	0R47										
25	25	1	1										
100	100	10	10										
		1000	1000										
Please indicate the above information, when you inquire.													
Example													
*Long lead type		50	PX	2R2	M	EFC		5×11					
*Taping type		35	ZLJ	220	M		TA	8×16					

◆OPTION

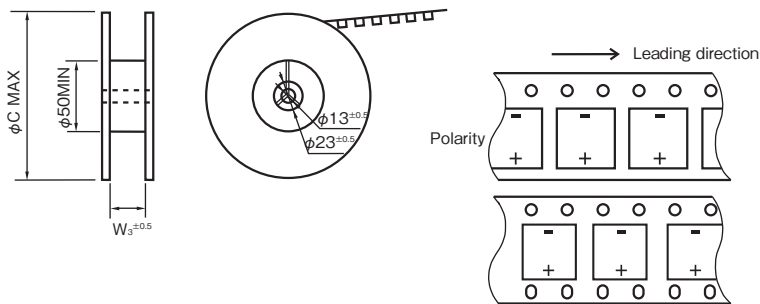
Please confirm each series page.

◆CHIP TYPE PART NUMBER

□□□ Rated Voltage		□□□□ Series		□□□□□ Capacitance		□ Capacitance Tolerance		□□□ Option		D×L Case Size	
↑		↑		↑		↑		↑		↑	
Rated Voltage(V)	Code	Cap.(μF)	Code	Tolerance	Code	4×6.1 8×10.5 16×21.5					
6.3	6.3	4.7	4R7	±20%	M						
10	10	220	220								
25	25	3300	3300								
100	100										
Please indicate the above information, when you inquire.											
Example											
35	TZV	330		M		10×10.5					

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
φ4×5.5	12.0	4.7	4.7	8	5.7	5.5	0.4	—	Fig.1
φ5×5.5	12.0	5.7	5.7	12	5.7	5.5	0.4	—	
φ6.3×5.5	16.0	7.0	7.0	12	5.7	7.5	0.4	—	
φ4×6.1	12.0	4.7	4.7	8	6.2	5.5	0.4	—	
φ5×6.1	12.0	5.7	5.7	12	6.2	5.5	0.4	—	
φ6.3×6.1	16.0	7.0	7.0	12	6.2	7.5	0.4	—	
φ6.3×8	16.0	7.0	7.0	12	8.2	7.5	0.4	—	
φ8×6.5	16.0	8.7	8.7	12	6.8	7.5	0.4	—	
φ8×10.5	24.0	8.7	8.7	16	11.0	11.5	0.4	—	
φ10×10.5	24.0	10.7	10.7	16	11.0	11.5	0.4	—	Fig.2
φ12.5×13.5	32.0	13.4	13.4	24	14.4	14.2	0.5	28.4	
φ12.5×16	32.0	13.4	13.4	24	16.3	14.2	0.5	28.4	
φ16×16.5	44.0	17.5	17.5	28	17.4	20.2	0.5	40.4	
φ16×21.5	44.0	17.5	17.5	28	22.4	20.2	0.5	40.4	
φ18×16.5	44.0	19.5	19.5	32	17.4	20.2	0.5	40.4	
φ18×21.5	44.0	19.5	19.5	32	22.4	20.2	0.5	40.4	

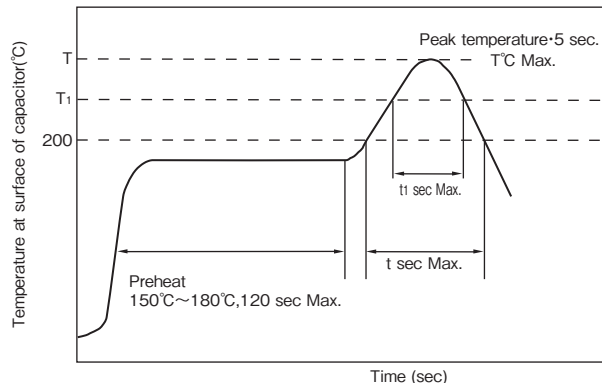
◆TAPING REEL AND PACKING QUANTITY


Size	W ₃ (mm)	φC (mm)	Q'ty (pcs/reel)	Standard Shipping Carton Quantity (pcs/Box)
φ4×5.5,6.1	14	382	2,000	10,000
φ5×5.5,6.1	14	382	1,000	5,000
φ6.3×5.5,6.1	18	382	1,000	5,000
φ6.3×8	18	382	900	4,500
φ8×6.5	18	382	1,000	5,000
φ8×10.5	26	382	500	2,000
φ10×10.5	26	382	500	2,000
φ12.5×13.5	34	332	200	600
φ12.5×16	34	332	150	450
φ16×16.5, φ18×16.5	46	332	125	250
φ16×21.5, φ18×21.5	46	332	75	150

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

◆LEAD FREE TYPE REFLOW SOLDERING CONDITION
●Size $\phi 4 \sim \phi 10$

- 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 and $T_1^{\circ}\text{C}$ shall not exceed t and t_1 seconds, respectively.
- 3) Preheat shall be made at $150^{\circ}\text{C} \sim 180^{\circ}\text{C}$ and for maximum 120 seconds.



Series	Size	$T(^{\circ}\text{C})$ ①	$T_1(^{\circ}\text{C})$	$t(\text{sec})$ ②	$t_1(\text{sec})$ ③	Reflow cycle
SGV TZV TKV	$\phi 4 \sim \phi 6.3$	250	230	90	40	1
TPV TLV TXV	$\phi 8$	240	230	90	30	1
THV TGV	$\phi 10$	240	230	60	30	1
SJV SLV	$\phi 4 \sim \phi 6.3$	240	220	60	40	1
JGV	$\phi 4 \sim \phi 6.3$	260	217	—	60	2
JZV	$\phi 8, \phi 10$	250	217	—	60	2

① Peak temperature

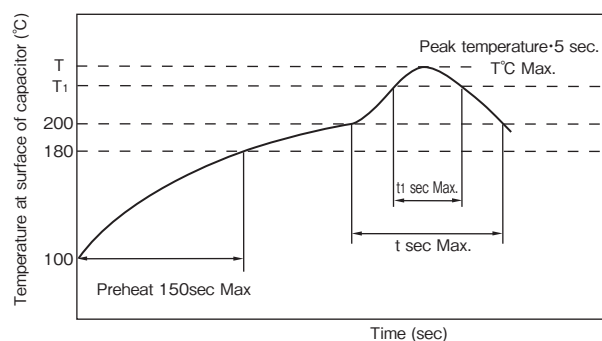
② Time more than 200°C (MAX)

③ Time more than T_1 (MAX)

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

●Size $\phi 12.5 \sim \phi 18$

- 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 and $T_1^{\circ}\text{C}$ shall not exceed t and t_1 seconds, respectively.
- 3) Preheat shall be made at $100^{\circ}\text{C} \sim 180^{\circ}\text{C}$ and for maximum 150 seconds.



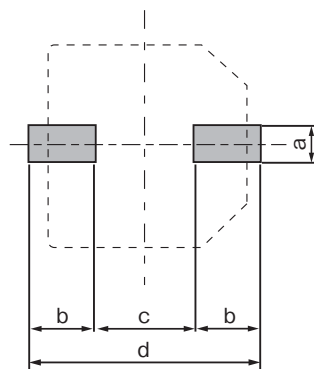
Series	Size	$T(^{\circ}\text{C})$ ①	$T_1(^{\circ}\text{C})$	$t(\text{sec})$ ②	$t_1(\text{sec})$ ③	Reflow cycle
SGV TLV TGV	$\phi 12.5 \sim \phi 18$	240	230	60	30	1

① Peak temperature

② Time more than 200°C (MAX)

③ Time more than T_1 (MAX)

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

◆RECOMMENDED LAND SIZE


Size	a	b	c	d
$\phi 4$	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

(mm)

◆Vibration proof packages with the supporting terminal

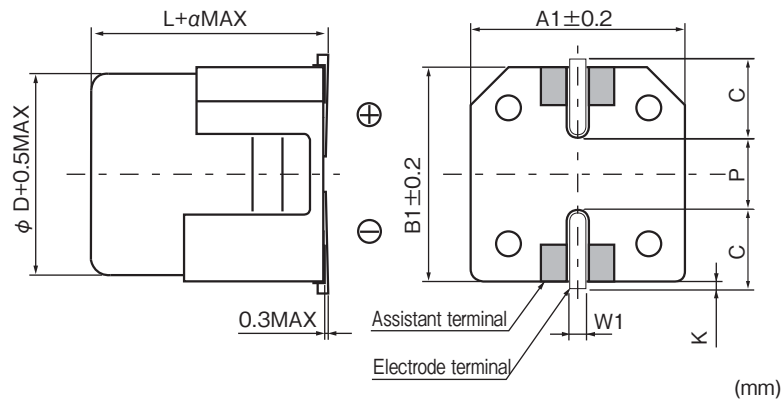
- For chip Aluminum electrolytic capacitors more than case size $\phi 8$, vibration proof packages supports.



◆PART NUMBER

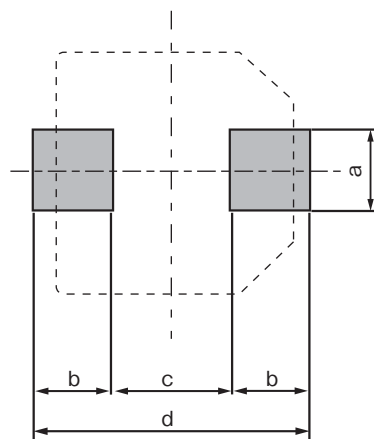
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VB
D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Vibration proof package No. Case Size

◆DIMENSIONS



Size($\phi D \times L$)	A1	B1	C	W1	P	K	a
8×10.5	8.3	8.3	3.1	0.9±0.2	3.1	0.5±0.4	0.5
10×10.5	10.3	10.3	3.4	0.9±0.2	4.5	0.5±0.4	0.5
12.5×13.5	13	13	4.9	1.1±0.3	4.5	0.7±0.4	1
12.5×16	13	13	4.9	1.1±0.3	4.5	0.7±0.4	1
16×16.5	17	17	6	1.1±0.3	6.8	0.7±0.4	1
16×21.5	17	17	6	1.1±0.3	6.8	0.7±0.4	1
18×16.5	19	19	7	1.1±0.3	6.8	0.7±0.4	1
18×21.5	19	19	7	1.1±0.3	6.8	0.7±0.4	1

◆RECOMMENDED LAND SIZE



サイズ Size($\phi D \times L$)	a	b	c	d
8×10.5	4.2	4.5	2.5	11.5
10×10.5	4.2	4.8	3.9	13.5
12.5	6.4	6.2	3.9	16.3
16	7	7.8	4.7	20.3
18	7	8.8	4.7	22.3