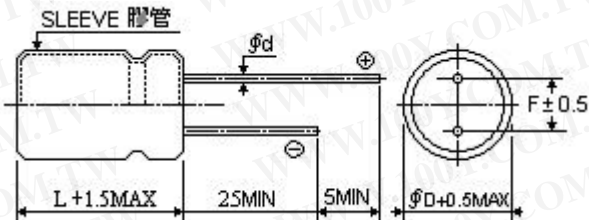


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<b>CODE</b>	<b>YOUR</b>	<b>NO</b>	<b>1000412007</b>
	<b>OUR</b>	<b>LZR332M0JG26VR6HTAAA</b>	<b>DATE</b>
<b>SERIES</b>	<b>LZ</b>	<b>TYPE</b>	<b>POLARITY</b>
<b>RATED VALUE</b>	<b>3300</b>	<b><math>\mu F</math></b>	<b>6.3 WV</b>
		<b>SAFETY VENT</b>	$\geq 6.3 \phi$



DIMENSION (mm)			
$\phi D$	10	L	26
$\phi d$	0.6	F	5.0

Item	Characteristics			
Operation Temperature Range	-	40	$^{\circ}C \sim +$	105 $^{\circ}C$
Capacitance Tolerance	-	20	% $\sim +$	20 % (M)
Surge Voltage (SV)		8		VDC
Leakage Current (LC)	$\leq$	207.9	$\mu A$	3 minutes
Dissipation Factor (DF, $\tan \delta$ )	$\leq$	0.26	120 Hz	25 $^{\circ}C$
E.S.R.	$\leq$		$\Omega$	120 Hz 25 $^{\circ}C$
Ripple Current (RC)	$\leq$	2500	mA	100K Hz 105 $^{\circ}C$
Impedance (Z)	$\leq$	0.014	$\Omega$	100K Hz 25 $^{\circ}C$
Low Temperature Stability	Impedance Ratio At 120Hz			
	Z	-25 $^{\circ}C$ / Z	+25 $^{\circ}C$	3 MAX
	Z	-40 $^{\circ}C$ / Z	+25 $^{\circ}C$	6 MAX
Load Life	After 3000 Hrs At 105 $^{\circ}C$			
	Capacitance Change	$\leq \pm$	25	% of initial value
	D.F. ( $\tan \delta$ )	$\leq$	200	% of initial specified value
	Leakage Current	$\leq$		initial specified value
	Out Look	Should be without any change		
Shelf Life	After 1000 Hrs At 105 $^{\circ}C$			
	Capacitance Change	$\leq \pm$	20	% of initial value
	D.F. ( $\tan \delta$ )	$\leq$	200	% of initial specified value
	Leakage Current	$\leq$	200	% of initial specified value
	Out Look	Should be without any change		
Terminal Strength	Pull Test	1.0	Kg	10 sec $\pm 1$
	Bend Test	0.5	Kg	2 cycle
Soldering	245 $\pm$ 5 $^{\circ}C$		Soldering must covered	
	2.5 $\pm 0.5$ sec		more than 90%	

TEST FREQ : 120Hz	TEST TEMP : 25 $^{\circ}C$	REFERENCE STANDARD: JIS C5101-4
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APPROVER	CHECKER	DESIGNER

# 編碼原則 PART NUMBER

SN	R	102	M	1C	G	21	V	R	6	HM	AAA
系列 SERIES	型式 TYPE & FORMING	容量 CAPACITANCE ( $\mu$ F)	級數 CAP TOLERAN CE	電壓 VOLTAGE (WV)	直徑 CASE SIZE ( $\phi$ D)	長度 CASE SIZE (L)	防爆 VENT	迫緊型式 RUBBER	端子線 LEAD WIRE	膠管 RUBBER TUBE	加工型式 PROCESSING MODELLING

Series
LE
LT
LR
LZ
LL
ZL
LS
LH
HS
HK
HG
SN
HT
SP
LB
BL
HR
SU
SS
SH
NP
NK
BP
LA
HC
EC
HL
ML

TYPE	Code
Radial	R
Radial Taping	P
Lead Cut	C
Lead Snap in	Y
Lead Forming	F
Cut	S
Snap in	S
Axial	A
Lead forming	B
Bending cut	L

CAP. ( $\mu$ F)	Code
0.1	0R1
0.22	R22
0.33	R33
0.47	R47
1	010
2.2	2R2
3.3	3R3
4.7	4R7
6.8	6R8
10	100
22	220
33	330
47	470
100	101
220	221
330	331
470	471
1000	102
1500	152
2200	222
3300	332
4700	472
10000	103
15000	153

TOLERANCE (%)	Code
+20	M
-20	M
+20	V
-10	V
+10	K
-10	K
+50	T
-10	T
+20	R
-0	R
+5	A
-5	A
+20	H
-5	H

Voltage (WV)	Code
4	0G
6.3	0J
10	1A
16	1C
25	1E
30	1F
35	1V
40	1G
50	1H
63	1J
75	1P
80	1K
100	2A
120	2T
160	2C
180	2K
200	2D
220	2L
250	2E
300	2F
315	2X
330	2Y
350	2V
400	2G
420	2S
450	2W
500	2H

$\phi$ D (mm)	Code
3	B
4	C
5	D
6	W
6.3	E
8	F
10	G
11	I
12.5	H
13	J
16	K
18	L
20	M
22	N
25	O
30	P
35	Q
40	R
51	V

Model	Code
NO VENT	A
VENT	V
VENT	X

Model	code
Flat Rubber	R
Rubber Stand-off	M
Snap-in	A

Size (mm)	code
0.45	4
0.5	5
0.6	6
0.8	8
1.0	1
Snap-in	A
Screw	B

Code Name	Material
HM	PVC
HT	PET

# ALUMINUM ELECTROLYTIC CAPACITOR SPECIFICATIONS

<b>SERIES</b>	<b>LZ</b>	<b>Reference standard</b>	<b>JIS C5101-4</b>
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**1. Scope**

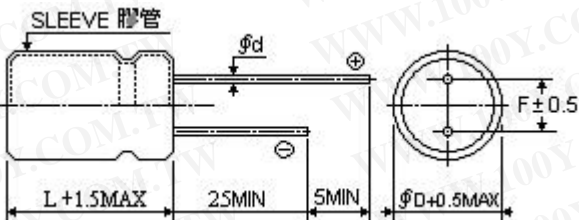
This specification applies to aluminum electrolytic capacitor, used in electronic equipment.

Type : Radial

**2. Electrical characteristics**

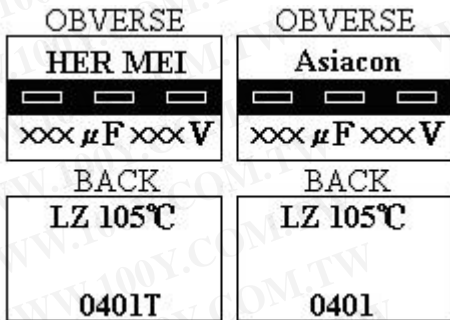
- (A) Operating temperature range : - 40 ~ +105°C
- (B) Capacitance tolerance : ±20%(M) 25°C 120Hz
- (C) Capacitance (CAP) : 27 μF ~ 10000 μF
- (D) Rated working voltage (WV) : DC 6.3 ~ 25V
- (E) Surge voltage (SV) : Values in Table 1 (P.4)
- (F) Leakage current (LC) : Values in Table 2 (P.4) or less
- (G) Dissipation Factor (DF, tan δ) : Values in Table 3 (P.4) or less
- (H) Low temperature stability : Values in Table 4 (P.4) or less

**3. Dimensions and materials**



φ D	4	5	6.3	8	10	13	16	18
φ d	L=7 0.45, L>7 0.5			0.5	0.6		0.8	
F	1.5	2.0	2.5	3.5	5.0		7.5	
	8×20			φ d=0.6		13×31 φ d=0.8		

**4. Marking**



- ←← Brand
- ←← Polarity of the terminals
- ←← Capacitance and Rated voltage
- ←← Series and Maximal operating temperature
- ←← Date code, (T)Representatives PET Marking, if not (T) Representatives PVC Marking

**5. Load life test**

After life test with rated ripple current at 105°C conditions stated in the table below, the capacitors shall meet the following requirements.

Capacitance Change	Within ±25% of the initial value
Dissipation Factor	Not more than 200% of the specified value
Leakage Current	Not more than the specified value
Life Time	φ D ≤ 8=2000hrs φ D ≥ 10=3000hrs

**6. Shelf life test**

After applying no rated voltage for 1000hrs at 105°C,

The capacitors shall meet the following requirements.

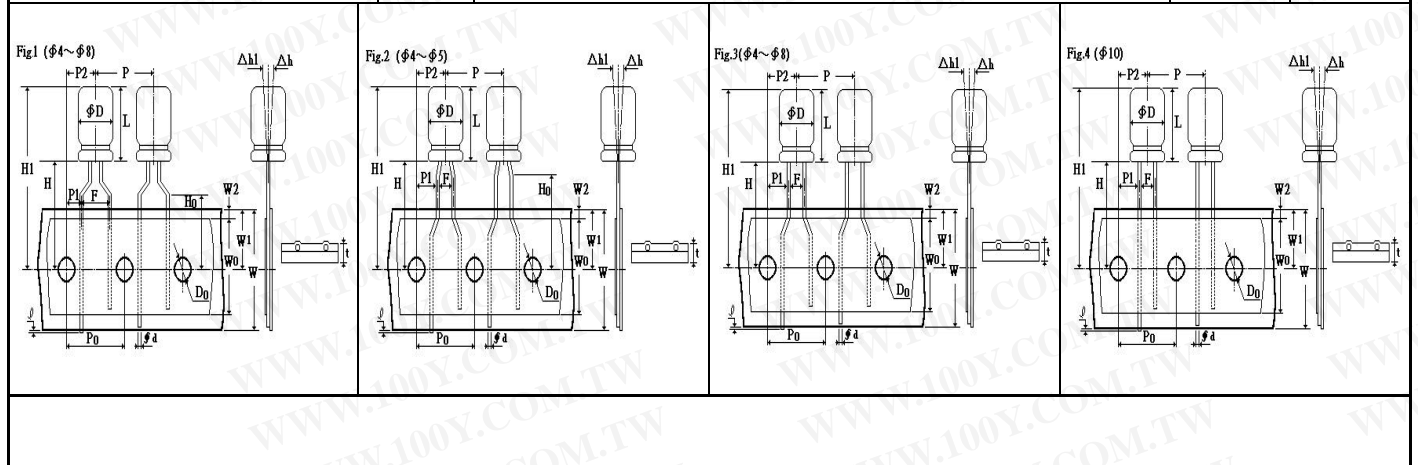
Capacitance Change	Within ±20% of the initial value
Dissipation Factor	Not more than 200% of the specified value
Leakage Current	Not more than 200% of the specified value

<b>SERIES</b>	<b>LZ</b>	Reference standard	<b>JIS C5101-4</b>																				
<p>7.Low temperature storage test</p> <p>The capacitor without rated voltage at the lowest operation temperature 16 hours, after two hours in room temperature, should do final measurements, the values are as following :</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Capacitance Change</td> <td>≤ ± 10% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>≤ initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤ initial specified value</td> </tr> </table>				Capacitance Change	≤ ± 10% of initial value	Dissipation Factor	≤ initial specified value	Leakage Current	≤ initial specified value														
Capacitance Change	≤ ± 10% of initial value																						
Dissipation Factor	≤ initial specified value																						
Leakage Current	≤ initial specified value																						
<p>8.Lead strength</p> <p>(A) Tensile strength:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align:center;">§ d</td> <td style="text-align:center;">≤0.5</td> <td style="text-align:center;">0.6</td> <td style="text-align:center;">0.8</td> <td style="text-align:center;">1.0</td> </tr> <tr> <td style="text-align:center;">Lead(Kg)</td> <td style="text-align:center;">0.5</td> <td colspan="2" style="text-align:center;">1.0</td> <td style="text-align:center;">2.5</td> </tr> </table> <p>The capacitor shall withstand the constant tensile force specified between the body and each lead for 10 seconds without either mechanically or electrically.</p> <p>(B) Bending strength:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align:center;">§ d</td> <td style="text-align:center;">≤0.5</td> <td style="text-align:center;">0.6</td> <td style="text-align:center;">0.8</td> <td style="text-align:center;">1.0</td> </tr> <tr> <td style="text-align:center;">Lead(Kg)</td> <td style="text-align:center;">0.25</td> <td colspan="2" style="text-align:center;">0.5</td> <td style="text-align:center;">1.0</td> </tr> </table> <p>With the capacitor in a vertical position apply the load specified axially to each lead. the capacitor shall be rotated slowly from the vertical to the horizontal position. Back to the vertical position. the 90° in the opposite direction and back the original position. performance of capacitor shall not have changed and leads shall be undamaged.</p>				§ d	≤0.5	0.6	0.8	1.0	Lead(Kg)	0.5	1.0		2.5	§ d	≤0.5	0.6	0.8	1.0	Lead(Kg)	0.25	0.5		1.0
§ d	≤0.5	0.6	0.8	1.0																			
Lead(Kg)	0.5	1.0		2.5																			
§ d	≤0.5	0.6	0.8	1.0																			
Lead(Kg)	0.25	0.5		1.0																			
<p>9.Solderability test</p> <p>Capacitor lead wire dipping in flux, and then dip in 245°C±5°C, solder liquid for 2.5±0.5 seconds, the substance is above the liquid solder 2mm, the dipping lead must be adherent 90% fresh tin at least.</p>																							
<p>10.Resistance to soldering heat</p> <p>Put capacitor lead wire to dip 260°C±5°C in solder liquor away the body 2mm, after 10±1 seconds taken out, after two hours in room temperature, should do final measurements, the values are following:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Capacitance Change</td> <td>≤ ± 10% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>≤ initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤ initial specified value</td> </tr> <tr> <td>Visual</td> <td>No damage</td> </tr> </table>				Capacitance Change	≤ ± 10% of initial value	Dissipation Factor	≤ initial specified value	Leakage Current	≤ initial specified value	Visual	No damage												
Capacitance Change	≤ ± 10% of initial value																						
Dissipation Factor	≤ initial specified value																						
Leakage Current	≤ initial specified value																						
Visual	No damage																						
<p>11.Surge test</p> <p>The capacitor shall be applied the surge voltage connected with the 1 kΩ resistor in room temperature, and shall be applied the surge voltage 1000 cycle, each for 30 seconds charge and 5 minutes 30 seconds discharge, the final test values should be as following:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Capacitance Change</td> <td>≤ ± 10% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>≤ initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤ initial specified value</td> </tr> <tr> <td>Visual</td> <td>No damage</td> </tr> </table>				Capacitance Change	≤ ± 10% of initial value	Dissipation Factor	≤ initial specified value	Leakage Current	≤ initial specified value	Visual	No damage												
Capacitance Change	≤ ± 10% of initial value																						
Dissipation Factor	≤ initial specified value																						
Leakage Current	≤ initial specified value																						
Visual	No damage																						
<p>12.Safety vent</p> <p>(A)Test condition (DC method)</p> <p>Reverse voltage shall be applied. then current is as below:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align:center;">Diameter</td> <td style="text-align:center;">≤ 22.4 mm</td> <td style="text-align:center;">1 A</td> <td style="text-align:center;">Diameter</td> <td style="text-align:center;">&gt; 22.4 mm</td> <td style="text-align:center;">10 A DC.</td> </tr> </table>				Diameter	≤ 22.4 mm	1 A	Diameter	> 22.4 mm	10 A DC.														
Diameter	≤ 22.4 mm	1 A	Diameter	> 22.4 mm	10 A DC.																		

SERIES	LZ	Reference standard	JIS C5101-4		
(B)Criteria					
(a) Safety vent shall be operated.					
(b) Emission of flame shall not be found before and after venting.					
(c) Terminal, lead wire, metal chip and so on shall not be flown apart and case shall not be separated before and after venting.					
(d) Sealing part and case shall not be separated before and after venting.					
(e) Protrude dimension of element is 5mm max. from vent.					
Multiplier for ripple current					
Frequency coefficient					
Frequency		120	1K	10K	100K
Coefficient	27~33 $\mu$ F	0.40	0.60	0.80	1.00
	39~330 $\mu$ F	0.50	0.70	0.90	1.00
	470~1000 $\mu$ F	0.60	0.80	0.93	1.00
	1200~10000 $\mu$ F	0.70	0.85	0.96	1.00
Table 1					
Surge voltage					
Rated Voltage	6.3	10	16	25	
Surge Voltage	8	13	20	32	
Table 2					
Leakage current (25°C)					
$I \leq 0.01CV$ or 3 $\mu$ A whichever is greater (After 3 minutes application of rated voltage)					
I : Leakage Current( $\mu$ A)    C : Rated Capacitance( $\mu$ F)    V : Rated Voltage(V)					
Table 3					
Dissipation Factor (25°C, 120Hz)					
Rated Voltage	6.3	10	16	25	
$\tan \delta$	0.22	0.19	0.16	0.14	
When rated capacitance is over 1000 $\mu$ F, $\tan \delta$ shall be added 0.02 to the listed value with increase of every 1000 $\mu$ F.					
Table 4					
Low Temperature Stability (120Hz)					
Rated Voltage	6.3	10	16	25	
Z(-25°C)/Z(+25°C)	3	3	2	2	
Z(-40°C)/Z(+25°C)	6	6	4	4	

# ALUMINUM ELECTROLYTIC CAPACITOR SPECIFICATIONS

SERIES	<b>LZ</b>	Reference standard						<b>JIS C5101-4</b>	
<b>■ TAPING SPECIFICATIONS ■ DIMENSIONS</b>									
Item	Symbol	Case Size						Tolerance	Remark
		4×7	5×7	6.3×7	5φ~8φ		10φ		
Diameter of lead	φ d	0.45			0.5 ~ 0.6		0.6	±0.05	
Height of body	L	8.0			21.5		31.5	Max.	
Distance from center to center of next body	P	12.7						±1.0	
Distance from center to center of next driving hole	P0	12.7						±0.2	
Distance between center of driving hole and lead	P1	3.85						±0.7	Fig.1 Fig.4
		5.35	5.10	-	5.1	-	-		Fig.2
		5.60	5.35	5.10	5.35	5.1	4.6		Fig.3
Distance between center of driving hole and body	P2	6.35						±1.0	
Pitch of lead	F	5.0						±0.3	Fig.1 Fig.4
		1.5	2.5	-	2.5	-	-		Fig.2,3 F1:
		-	2.0	2.5	2.0	2.5	3.5		5.0+0.5-1.0
Width of mounting tape	W	18.0						±0.5	
Width adhesive tape	W0	12.5						Min.	
Distance between center of driving hole and mounting tape edge	W1	9.0						±0.5	
Max. allowable distance between mounting and adhesive tape edges	W2	1.5						Max.	
Distance between center of driving hole and bottom of body	H	18.5						±0.3	Fig.1.Fig.4 Fig.2 Fig.3
Distance between center of driving hole and clinch part of lead	H0	16.0						±0.5	Fig.1.Fig.2
Distance between center of driving hole and top of body	H1	27.5		32.5		50.0		Max.	
Diameter of driving hole	D0	4.0						±0.3	
Protrusion of lead	ℓ	0.0						Max.	
Adhesive and base tape thickness	T	0.6						±0.3	
Off alignment of body top	△h	0.0						±2.0	
Off alignment of body top	△h1	0.0						±1.0	



SERIES	LZ	Reference standard	JIS C5101-4										
<b>LEAD CUTTING FORMING SPECIFICATIONS</b>													
Symbol : C Lead cut 4φ ~ 25φ		Unit : mm											
		φ D	4	5	6.3	8	10	13	16	18	20	22	25
		φ d	0.45	0.5		0.6		0.8		0.8		1.0	
F	1.5	2.5	2.5	3.5	5.0		7.5		10		11±1.0		
Symbol : F Lead form cut 4φ ~ 8φ		Unit : mm											
		φ D	4		5		6.3		8				
		φ d	0.45		0.5								
F	5.0												
Symbol : Y Snap in cut 5φ ~ 18φ		Unit : mm											
		φ D	5	6.3	8	10	13	16	18				
		φ d	0.5			0.6			0.8				
F	2.5	2.5	3.5	5.0		7.5							
Symbol : L Bending cut 8φ ~ 22φ		Unit : mm											
		φ D	8	10	13	16	18	20	22				
		φ d	0.5	0.6		0.8		0.8					
F	3.5	5.0		7.5		10							

**PACKAGING SPECIFICATION**  
 ● Please note the order quantity must be in multiples of the minimum quantity. 個( pcs )

SIZE	BULK						TAPING MINIMUM QUANTITY	
	QUANTITY PER VINYL BAG		MINIMUM QUANTITY					
	LONG LEAD	LEAD FORMING	LONG LEAD		LEAD FORMING			
LEAD WIRE TYPE	4φ	5~7L	1000	1000	14000		5L : 40000 7L : 35000	2000
	5φ	5~7L	1000	1000	5L : 14000 7L : 12000		5L : 35000 7L : 30000	2000
		11L			10000	20000		
	6.3φ	5~7L	1000	1000	10000		20000	1500
		11L			8000	14000		
	8φ	7L	1000	1000	8000		12000	1000
		9~12L	500	9L : 1000	500	9L : 8000	7500 9L : 12000	
	10φ	14L~	500	500	5000	16L : 4000 20L : 3000	14L : 7000 16L : 6000 20L : 5000	1200
		10~17L	500	500	4000	13~14L : 3500 15~17L : 3000	13L : 5000 16L : 4000 17L : 3500	
	13φ	21L	200	200	2400		3000	800
		23~30L	200	200	2000	30L : 1600	24L : 2800 25~26L : 2400 30L : 2000	
	16φ	13~21L	200	200	13~16L : 2000 21L : 1600	13L : 2800 16L : 2400 21L : 2000		-
		26~36L	100	100	26L : 1200 31L : 1000 36L : 800	26L : 1400 31L : 1200 36L : 1000		
	18φ	16~21L	100	100	16L : 1200 21L : 1000		1400 21L : 1200	
		25~26L			800		1000	
		30~36L			32L : 700 30L、35L : 600		700	
40L		500			500			
20φ	15~21L	100	100	15~18L : 1000 21L : 800		15~18L : 1000 21L : 800		
	25~26L			600		800		
	32~36L			500		32L : 500 35~36L : 400		
	38~41L			400		400		
22φ	25~35L	100	100	25L : 500 35L : 400	25L : 500 35L : 400			
25φ	25~26L	50	50	400		400		
	28~40L	50	50	28L、35L : 300 30L、40L : 250	28L~30L : 250 40L : 200			
25φ	40~45L	50	50	40L : 200 45L : 150	45L : 150			

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