

EG Series

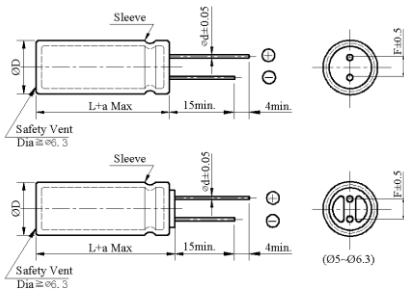
- Low impedance and High ripple current
- Load life 3,000 to 6,000 hours at 105°C



◆ SPECIFICATIONS

Item	Performance Characteristics																		
Category Temperature Range	-55~ +105°C																		
Working Voltage Range	6.3 ~ 63Vdc																		
Capacitance Range	10 ~ 10,000µF																		
Capacitance Tolerance	±20% (at 25°C and 120Hz)																		
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> </tr> </table>	Rated Voltage (V)	6.3	10	16	25	35	50	63	tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09		
	Rated Voltage (V)	6.3	10	16	25	35	50	63											
tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09												
The above values should be increased																			
Leakage Current	I=0.01CV or 3µA whichever is greater I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes																		
Low Temperature Characteristics Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td>Z(-55°C)/Z(+20°C)</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage (V)	6.3	10	16	25	35	50	63	Z(-55°C)/Z(+20°C)	4	3	3	3	3	3	3		
	Rated voltage (V)	6.3	10	16	25	35	50	63											
Z(-55°C)/Z(+20°C)	4	3	3	3	3	3	3												
(at 120Hz)																			
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25 °C after subjected to DC voltage with the rated ripple current is applied for 3,000~6,000 hours at 105 °C																		
	<table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±25% of the initial value</td> <td>Size</td> <td>Life time (hours)</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 200% of the specified value</td> <td>≅ 6.3Φ</td> <td>3,000</td> </tr> <tr> <td rowspan="2">Leakage current</td> <td rowspan="2">≅ specified value</td> <td>≅ 8 Φ</td> <td>4,000</td> </tr> <tr> <td>≅ 10Φ</td> <td>5,000</td> </tr> <tr> <td></td> <td></td> <td>≅ 12.5Φ</td> <td>6,000</td> </tr> </table>	Capacitance change	≅ ±25% of the initial value	Size	Life time (hours)	Dissipation factor(tanδ)	≅ 200% of the specified value	≅ 6.3Φ	3,000	Leakage current	≅ specified value	≅ 8 Φ	4,000	≅ 10Φ	5,000			≅ 12.5Φ	6,000
	Capacitance change	≅ ±25% of the initial value	Size	Life time (hours)															
	Dissipation factor(tanδ)	≅ 200% of the specified value	≅ 6.3Φ	3,000															
Leakage current	≅ specified value	≅ 8 Φ	4,000																
		≅ 10Φ	5,000																
		≅ 12.5Φ	6,000																
The following requirements shall be satisfied when the capacitor are restored to 25 °C after exposing them for 1,000 hours at 105 °C without voltage applied.																			
<table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±25% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ 200% of the specified value</td> </tr> </table>	Capacitance change	≅ ±25% of the initial value	Dissipation factor(tanδ)	≅ 200% of the specified value	Leakage current	≅ 200% of the specified value													
Capacitance change	≅ ±25% of the initial value																		
Dissipation factor(tanδ)	≅ 200% of the specified value																		
Leakage current	≅ 200% of the specified value																		
Others	Conforms to JIS-C-5101-4 (1998), characteristic W																		

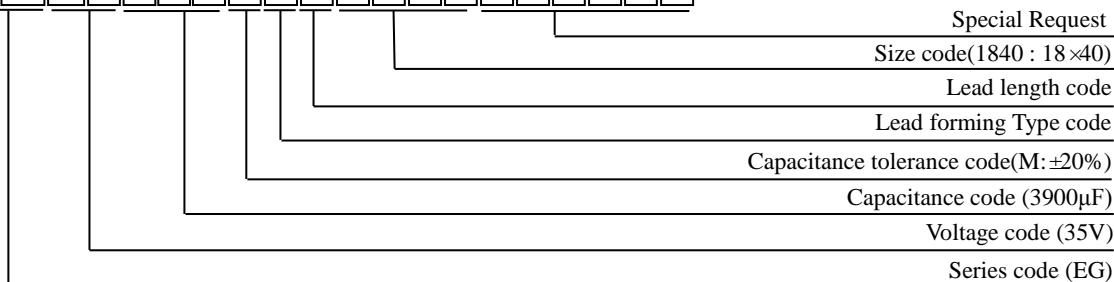
◆ DIMENSIONS (mm)



ΦD	5	6.3	8	10	12.5	16	18
ΦD	ΦD + 0.5 Max						
Φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
a	L + 1.5 Max				$\leq 35 L + 1.5 \text{Max}$ $\geq 40 L + 2.0 \text{Max}$	L + 1.5 Max	

◆ PART NUMBER SYSTEM (Example : 35V 3900 µF)

E G I V 3 9 2 M N N 1 8 4 0



Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	EG	NO.:	PUBLISH DATE	2022-03-25
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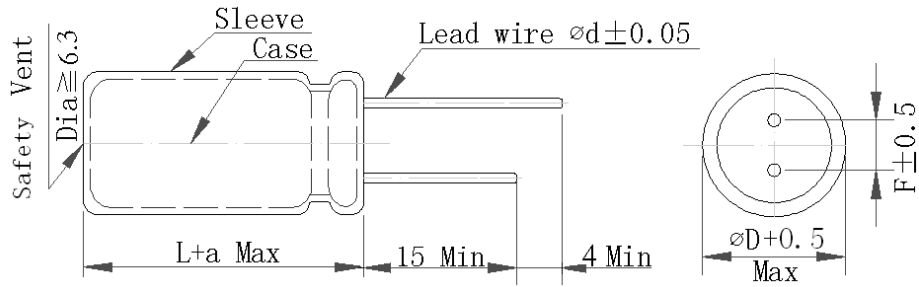


FIG-1

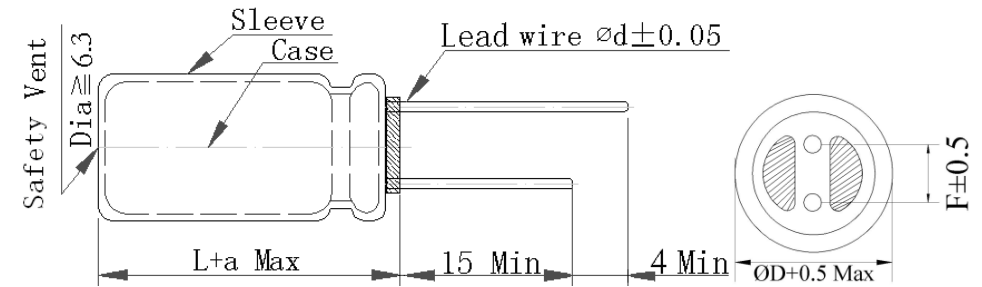


FIG-2

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @ 25°C (mΩ max/ 120Hz)	Impedance @ 20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														DΦ	L	a	d	F	
1	EG1C100MNN0511U	/	10 μF	±20%	16 V	/	-55~+105	/	/	50	/	2500	3000	5	11	/	/	2.0	FIG-2
2	EG1E4R7MNN0511U	/	4.7 μF	±20%	25 V	/	-55~+105	/	/	120	/	1200	3000	5	11	/	/	2.0	FIG-2
3	EG1E101MNN6311U	/	100 μF	±20%	25 V	/	-55~+105	/	/	340	/	250	3000	6.3	11	/	/	2.5	FIG-2
4	EG1V560MNN6311U	/	56 μF	±20%	35 V	/	-55~+105	/	/	230	/	770	3000	6.3	11	/	/	2.5	FIG-2
5	EG1H470MNN6311U	/	47 μF	±20%	50 V	/	-55~+105	/	/	220	/	400	3000	6.3	11	/	/	2.5	FIG-2
6	EG1V221MNN0816	/	220 μF	±20%	35 V	/	-55~+105	/	/	840	/	130	4000	8	16	/	/	3.5	FIG-1
7	EG1J471MNN1225EF7	/	470 μF	±20%	63 V	/	-55~+105	/	/	1720	/	70	7000	12.5	25	/	/	5	FIG-1
8	EG1E222MNN1625EF8	/	2200 μF	±20%	25 V	/	-55~+105	/	/	2555	/	22	8000	16	25	/	/	7.5	FIG-1
9	EG1V182MNN1625EF8	/	1800 μF	±20%	35 V	/	-55~+105	/	/	3080	/	22	8000	16	25	/	/	7.5	FIG-1



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TEL: +886 2 2995 0535 <http://www.chinsan.com/products/>

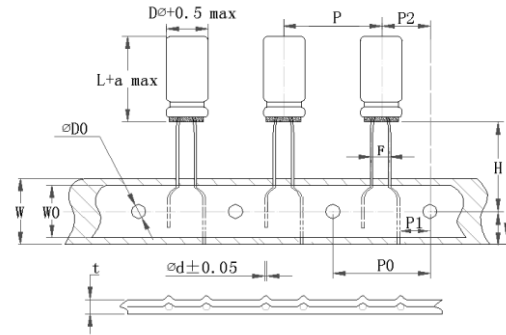
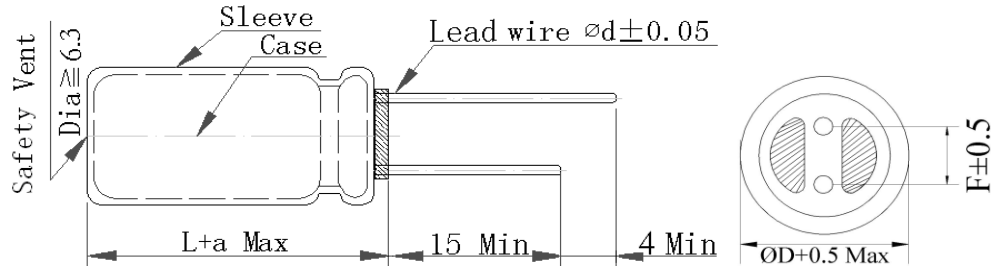
10	EG1H102MNN1625EF8	/	1000 μ F	\pm 20%	50 V	/	-55~+105	/	/	2555	/	34	8000	16	25	/	/	7.5	FIG-1
11	EG1H222MNN18P1EF8	/	2200 μ F	\pm 20%	50 V	/	-55~+105	/	/	3100	/	23	8000	18	35.5	/	/	7.5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
1.Sleeve Color: Brown. 2.Suffix U indicates convex rubber cover. 3.Suffix F7 indicates the life of the capacitor is 7000 hrs. 4.Suffix F8 indicates the life of the capacitor is 8000 hrs.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	EG	NO.:	PUBLISH DATE	2022-03-25
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Unit (mm):
P=12.7±1.0 H=18.5±0.5
P0=12.7±0.2 P1=3.85±0.5
P2=6.35±1.0 W =18.0±0.5
W1=9.0±0.5 F=2.5+0.8/-0.2
W0=12.5MIN ΦD0=4.0±0.2
Φd=0.5±0.05 t=0.7±0.2

Original

FIG-1

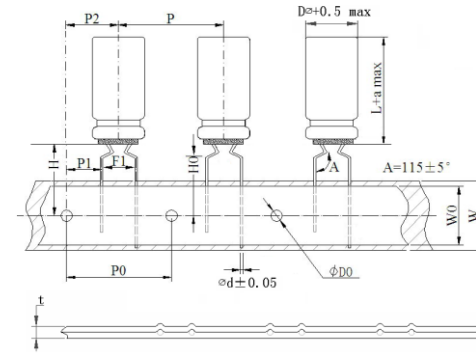
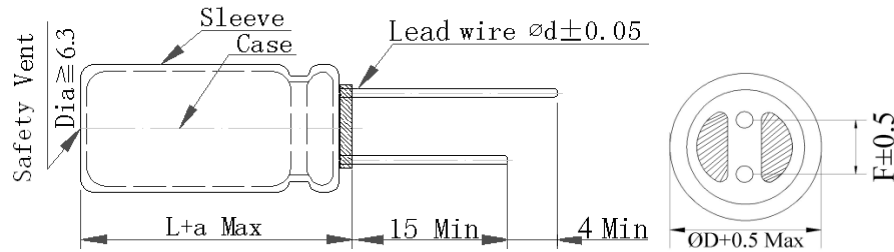
No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														DΦ	L	a	d	F	
1	EG1C470MP20511U	/	47 μF	±20%	16 V	/	-55~+105	/	/	120	/	900	3000	5	11	/	/	2.5	FIG-1
2	EG1H100MP20511EU	/	10 μF	±20%	50 V	/	-55~+105	/	/	105	/	1500	3000	5	11	/	/	2.5	FIG-1
3	EG1H4R7MP20511EU	/	4.7 μF	±20%	50 V	/	-55~+105	/	/	70	/	1500	3000	5	11	/	/	2.5	FIG-1
4	EG1H220MP20511U	/	22 μF	±20%	50 V	/	-55~+105	/	/	180	/	1200	3000	5	11	/	/	2.5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
1.Sleeve Color: Brown. 2.Suffix U indicates convex rubber cover.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

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Unit(mm):
P=12.7±1.0 H0=16.0±0.5
P0=12.7±0.2 W =18.0±0.5
P1=3.85±0.5 W0=12.5MIN
P2=6.35±1.0 ΦD0=4.0±0.2
F1=5.0+0.8/-0.2 H=18.5±0.5
t=0.7±0.2

Original

FIG-1

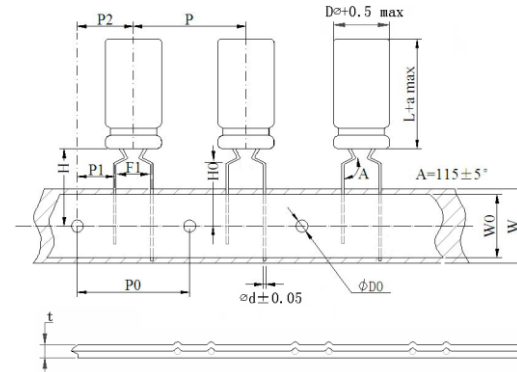
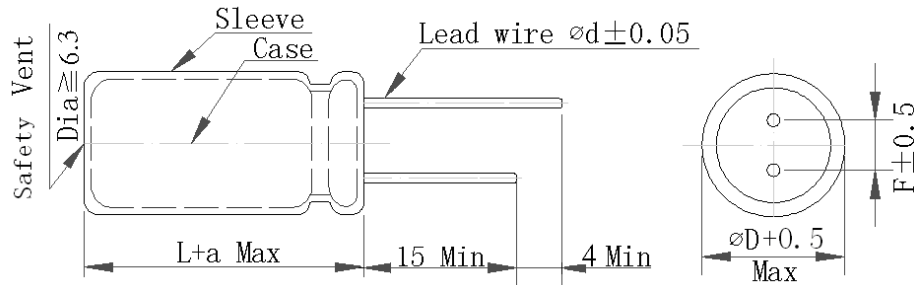
No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														DΦ	L	a	d	F	
1	EG2A330MP50812ERSU	/	33 μF	±20%	100 V	/	-55~+105	/	/	724	/	680	4000	8	12	/	/	5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
1.Sleeve Color: Brown. 2.Suffix U indicates convex rubber cover.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	EG	NO.:	PUBLISH DATE	2022-03-25
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Unit(mm):

P=12.7±1.0	H0=16.0±0.5
P0=12.7±0.2	W =18.0±0.5
P1=3.85±0.5	W0=12.5MIN
P2=6.35±1.0	ΦD0=4.0±0.2
F1=5.0+0.8/-0.2	H=18.5±0.5
t=0.7±0.2	

Original

FIG-1

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														D Φ	L	a	d	F1	
1	EG1H121MP50816F5	/	120 μF	±20%	50 V	/	-55~+105	/	/	690	/	/	5000	8	16	/	/	5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:

- 1.Sleeve Color: Brown.
- 2.Suffix U indicates convex rubber cover.
- 3.Suffix F5 indicates the life of the capacitor is 5000 hrs.

APPROVED BY

张洪斌

CHECKED BY

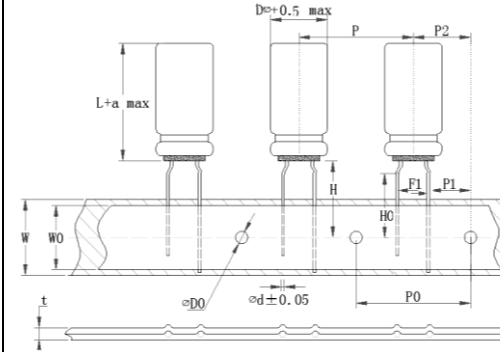
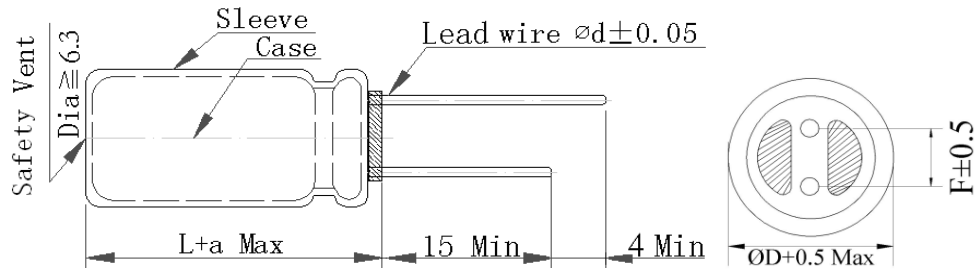
曾爱娥

PREPARED BY

梁慧妍

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	EG	NO.:	PUBLISH DATE	2022-03-25
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Unit (mm):

P=12.7±1.0	H0=16.0±0.5
P0=12.7±0.2	W=18.0±0.5
P1=3.85±0.5	W0=12.5MIN
P2=6.35±1.0	ΦD0=4.0±0.2
F1=5.0+0.8/-0.2	t=0.7±0.2
H=18.5±0.5	

Original

FIG-1

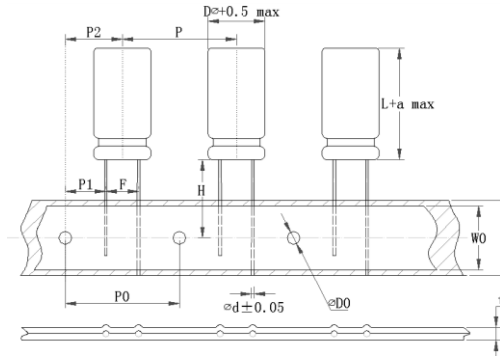
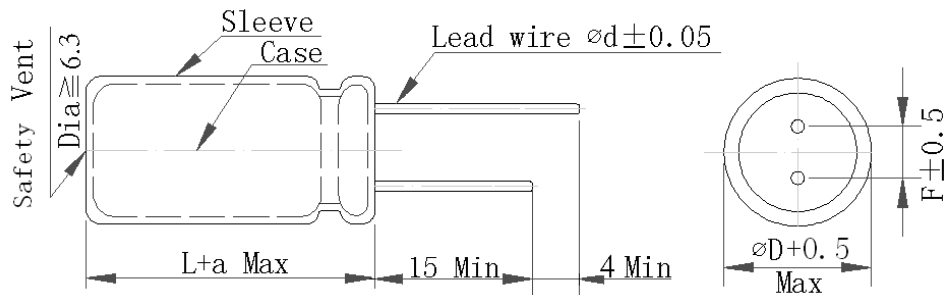
No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														D Φ	L	a	d	F1	
1	EG1H100MPN0511U	/	10 μF	±20%	50 V	/	-55~+105	/	/	115	/	1450	3000	5	11	/	/	5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
1.Sleeve Color: Brown. 2.Suffix U indicates convex rubber cover.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

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Unit(mm):

P=12.7±1.0

H=18.5±0.5

P0=12.7±0.2

W =18.0±0.5

P1=3.85±0.5

W0=12.5MIN

P2=6.35±1.0

ΦD0=4.0±0.2

F=5.0+0.8/-0.2

t=0.7±0.2

Original

FIG-1

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														DΦ	L	a	d	F	
1	EG1E681MPN1020E	/	680 μF	±20%	25 V	/	-55~+105	/	/	1400	/	70	5000	10	20	/	/	5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Brown.	张洪斌	曾爱娥	梁慧妍