

MV Series

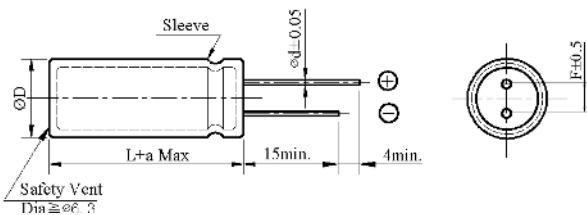
- High ripple current
- Low ESR
- Load life 5,000 hours at 105°C



◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-25 ~ +105 °C
Working Voltage Range	160 ~ 450Vdc
Capacitance Range	6.8 ~ 470 μF
Capacitance Tolerance	±20% (at 25°C and 120Hz)
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V) 160~ 450
	tanδ(Max) 0.15
Leakage Current	$I=0.03CV + 10\mu A$ 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)	Rated voltage (V) 160~250 400 420 ~ 450
	Z(-25°C)/Z(+20°C) 3 5 6 (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 5,000 hours at 105°C.
	Capacitance change ≅ ±20% of the initial value
	Dissipation factor(tanδ) ≅ 200% of the specified value
Shelf Life	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.
	Capacitance change ≅ ±20% 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	10	12.5 L < 35	16	18
ΦD	ΦD +0.5 Max			
Φd	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
a	L + 1.5 Max	≤ 35 L+1.5Max ≥ 40 L+2.0 Max	L + 1.5 Max	

◆ PART NUMBER SYSTEM(Example : 350V 100μF)

M V 2 V 1 0 1 M N N 1 8 4 5

Special Request

Size code(1845 : 18x45)

Lead length code

Lead forming Type code

Capacitance tolerance code(M: ±20%)

Capacitance code (100μF)

Voltage code(350V)

Series code(MV)

Aluminum Electrolytic Capacitor

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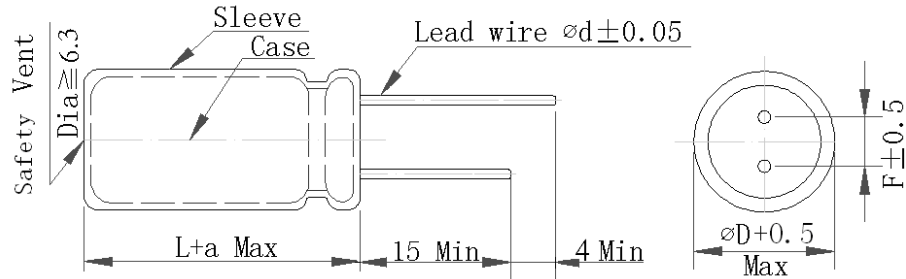


FIG-1

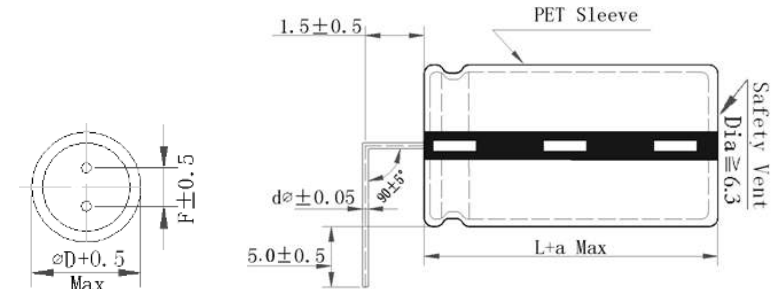


FIG-2

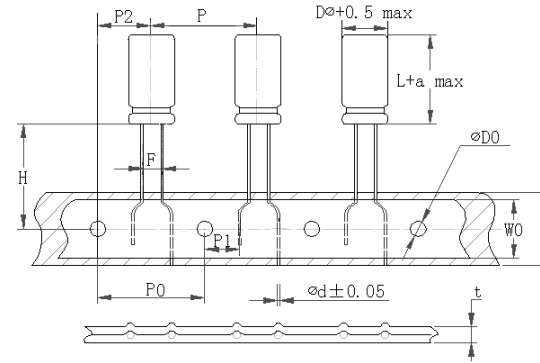
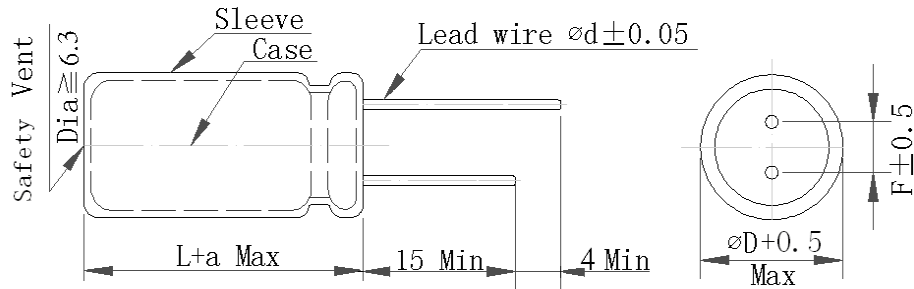
No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	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	MV2C390MNN1212	/	39 μF	±20%	160 V	/	-25~+105	/	/	200	/	/	/	5000	12.5	12	/	/	5	FIG-1
2	MV2G121MNN1830	/	120 μF	±20%	400 V	/	-25~+105	/	/	735	/	/	/	5000	18	30	/	/	7.5	FIG-1
3	MV2S121MNN18N3	/	120 μF	±20%	420 V	/	-25~+105	/	/	775	/	/	500	5000	18	31.5	/	/	7.5	FIG-1
4	MV2W101MNN1650	/	100 μF	±20%	450 V	/	-25~+105	/	/	750	/	/	/	5000	16	50	/	/	7.5	FIG-1
5	MV2W121MNN1640	/	120 μF	±20%	450 V	/	-25~+105	/	/	700	/	/	/	5000	16	40	/	/	7.5	FIG-1
6	MV2S101MNN1630A4ER	/	100 μF	±20%	420 V	/	-25~+105	/	/	900	1400	/	400	4000	16	30	/	/	7.5	FIG-1
7	MV2G101MR51830R	/	100 μF	±20%	400 V	/	-25~+105	/	/	945	/	/	/	5000	18	30	/	/	7.5	FIG-2
8	MV2G680MNN1625A6	/	68 μF	±20%	400 V	/	-25~+105	/	/	700	/	/	600	5000	16	25	/	/	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
Sleeve Color: Black.	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 P1=3.85±0.5
 P2=6.35±1.0 W =18.0±0.5
 F=3.5±0.3 W0=12.5MIN
 ΦD0=4.0±0.2 Φd=0.6 ±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 120Hz	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	MV2W4R7MP308B5A6	/	4.7 μF	±20%	450 V	/	-25~+105	/	/	75	/	/	5000	6000	8	11.5	/	/	3.5	FIG-1

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

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Sleeve Color: Black.	张洪斌	曾爱娥	梁慧妍