Taiwan Chinsan Electronic Ind., Co., Ltd.
Address: No.1, Alley 11, Lane 68, Sec.1, KwangFu Rd., SanChung Dist., New Taipei City 24158, Taiwan
TEL: +886 2 2995 0535 http://www.chinsan.com/products/

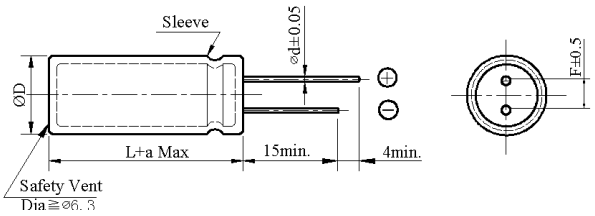
MV Series

- **High ripple current**
- **Low ESR**
- **Load life 5,000 hours at 105℃**

◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-25~ +105℃
Working Voltage Range	160 ~ 450Vdc
Capacitance Range	6.8 ~ 470 μF
Capacitance Tolerance	±20% (at 25℃ and 120Hz)
Dissipation Factor (tanδ) (at 25℃, 120Hz)	Rated Voltage (V): 160~ 450; tanδ(Max): 0.15
Leakage Current	I=0.03CV + 10μA 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℃)/Z(+20℃): 3 / 5 / 6 (at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25℃ after subjected to DC voltage with the rated ripple current is applied for 5,000 hours at 105℃. Capacitance change: ≦ ±20% of the initial value Dissipation factor(tanδ): ≦ 200% of the specified value Leakage current: ≦ specified value
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25℃ after exposing them for 1,000 hours at 105℃ 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 : 18×45)
- Lead length code
- Lead forming Type code
- Capacitance tolerance code(M:±20%)
- Capacitance code (100μF)
- Voltage code(350V)
- Series code(MV)

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Aluminum Electrolytic Capacitor

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

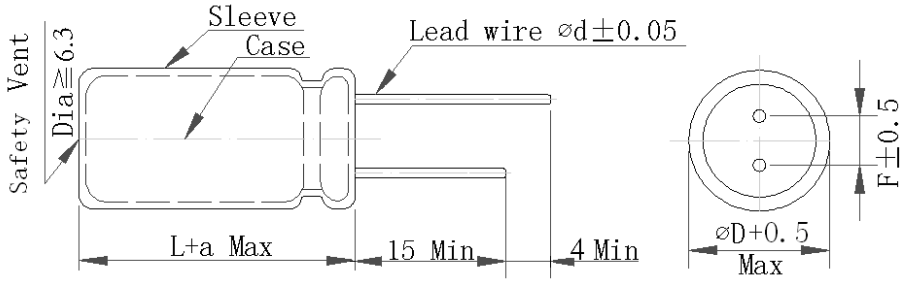

FIG-1

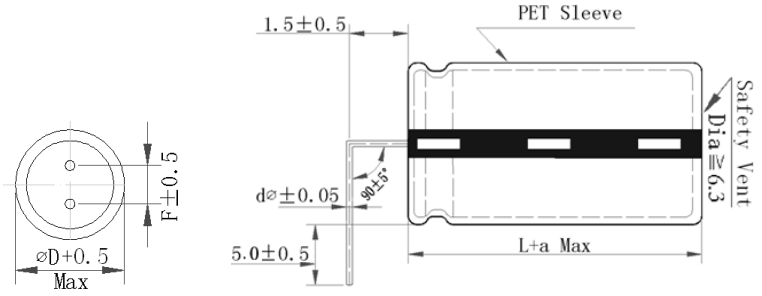

FIG-2

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (℃)	Tanδ @ 25℃ (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105℃ 120Hz	Rated Ripple Current (mA rms) @ 105℃ 100kHz	ESR @25℃ (mΩ max/ 120Hz)	Impedance @20℃ (mΩ max/ 100kHz)	Endurance @ 105℃ (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

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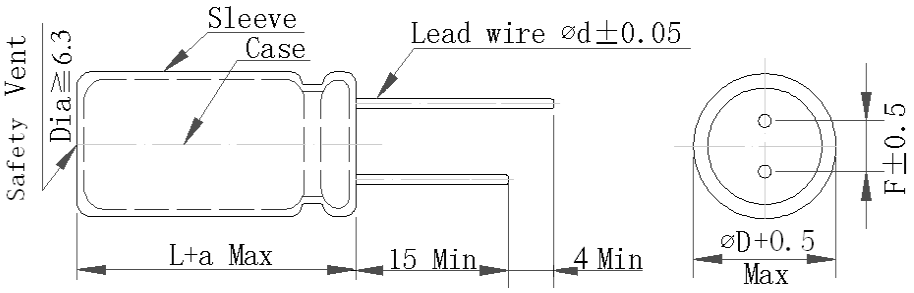

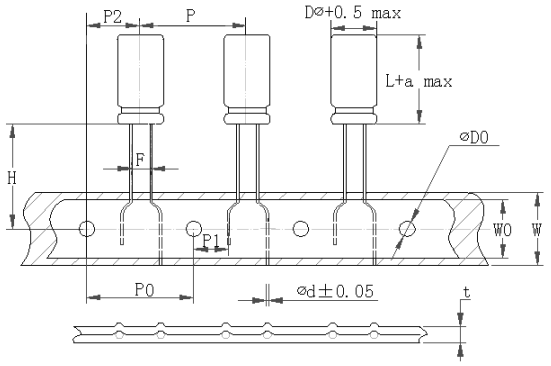

Unit (mm):

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 (℃)	Tanδ @ 25℃ (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105℃ 120Hz	Rated Ripple Current (mA rms) @ 105℃ 100kHz	ESR @25℃ (mΩ max/ 120Hz)	Impedance @20℃ (mΩ max/ 100kHz)	Endurance @ 105℃ (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.

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