

EP Series

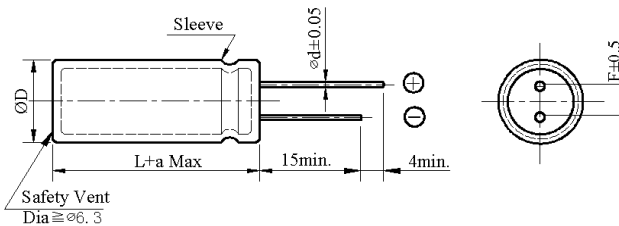
- Miniaturized, Low ESR and Low impedance
- Suitable for use in high ripple current capability
- Load life 4,000 hours at 105°C



◆ SPECIFICATIONS

Item	Performance Characteristics												
Category Temperature Range	-40 ~ +105°C												
Working Voltage Range	10 ~ 100Vdc												
Capacitance Range	68 ~ 1,800 µF												
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>10</td> <td>16</td> <td>25</td> <td>35</td> <td>100</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.08</td> </tr> </table>	Rated Voltage (V)	10	16	25	35	100	tanδ(Max)	0.19	0.16	0.14	0.12	0.08
	Rated Voltage (V)	10	16	25	35	100							
tanδ(Max)	0.19	0.16	0.14	0.12	0.08								
The above values should be increased by 0.02 for every additional 1000µF													
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>10</td> <td>16</td> <td>25</td> <td>35</td> <td>100</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>6</td> <td>6</td> <td>5</td> <td>4</td> <td>3</td> </tr> </table>	Rated voltage (V)	10	16	25	35	100	Z(-40°C)/Z(+20°C)	6	6	5	4	3
	Rated voltage (V)	10	16	25	35	100							
Z(-40°C)/Z(+20°C)	6	6	5	4	3								
(at 120Hz)													
Endurance	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 4,000 hours at 105°C.												
	<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>≒ specified value</td> </tr> </table>	Capacitance change	≒ ±25% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ specified value						
	Capacitance change	≒ ±25% 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°C after exposing them for 500 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						
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Others	Conforms to JIS-C-5101-4 (1998), characteristic W												

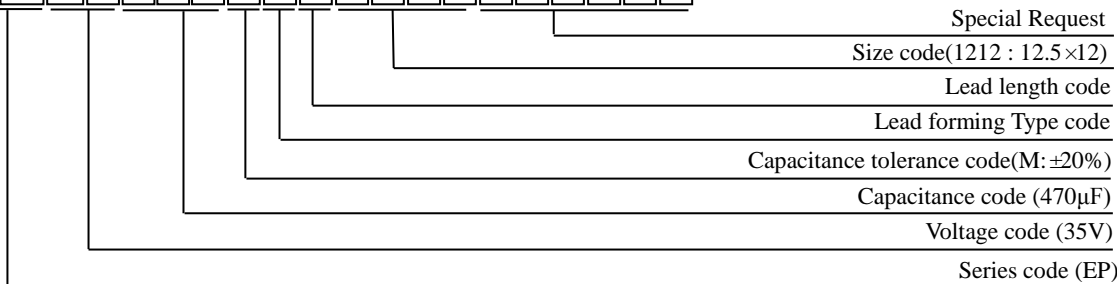
◆ DIMENSIONS (mm)



ΦD	12.5×12
ΦD	ΦD + 0.5 Max
Φd	0.6
F	5.0
a	L + 1.0 Max

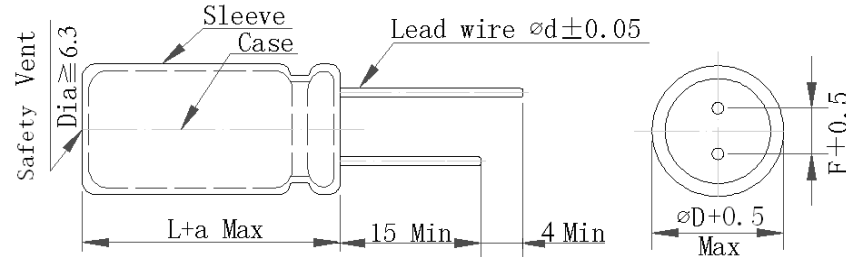
◆ PART NUMBER SYSTEM(Example : 35V 470µF)

EP1V471MNN1212



Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	EP	NO.:	PUBLISH DATE	2022-03-25
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No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tan δ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (m Ω max/ 120Hz)	Impedance @20°C (m Ω max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														D Φ	L	a	d	F	
1	EP1C102MNN1212	/	1000 μ F	$\pm 20\%$	16 V	/	-40~+105	/	/	1300	/	150	4000	12.5	12	/	/	5	---
2	EP1E102MNN1216	/	1000 μ F	$\pm 20\%$	25 V	/	-40~+105	/	/	1450	/	110	4000	12.5	16	/	/	5	---

※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