

## FEATURES

- Temperature range (-40°C ~ +105°C).
- Load life 1,000 hours @ 105°C)
- RoHs COMPLIANT

## PART NUMBERING

Part Number Example: 712E-016/100M4X5F							
712E	-	016	/	100	M	4X5	F
Type		Rated DC Voltage		Capacitance Code (μF)*	Tolerance Code	Size	RoHs Compliant

\* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).

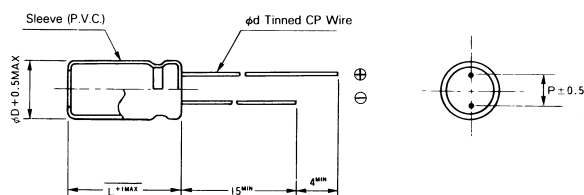
## SPECIFICATIONS

Operating Temperature Range	-40°C ~ +105°C							
Rated Voltage Range	4 ~ 50vdc							
Capacitance Range	0.1 ~ 220μF							
Capacitance Tolerance	±20% (120Hz 20°C)							
Leakage Current Max	I = 0.1 CV or 3 μA whichever is greater after 2 minutes @ rated voltage							
DF (%) @ +20°C 120Hz max	Working Voltage dc	4	6.3	10	16	25	35	50
	DF (%)	35	24	20	16	14	12	10
Low Temperature Characteristics Impedance Ratio Max @ 120Hz	Working Voltage dc	4	6.3	10	16	25	35	50
	Z-25°C / Z+20°C	6	3	3	2	2	2	2
	Z-40°C / Z+20°C	12	8	5	4	3	3	3
Load Life 1,000Hrs @ 105°C and rated voltage	Cap change	≤ ±20% of Initial measured value						
	DF	≤200% of Initial measured value						
	Leakage current	≤ Initial measured value						
Shelf Life 1,000Hrs @ 105°C	Cap change	≤ ±20% of Initial measured value						
	DF	≤200% of Initial measured value						
	Leakage curren	≤ Initial measured value						

## MULTIPLIER FOR RIPPLE CURRENT VS FREQ.

FREQUENCY (Hz)	50(60)	120	1K	10K>
0.1~68μF	0.8	1	1.3	1.5
100~220μF	0.8	1	1.15	1.2

## DIMENSIONS



## DIMENSIONS (UNIT: mm)

Diam	3	4	5	6.3	8
F	1±.3	1.5±.5	2±.5	2.5±.5	3.5±.5
Φ	0.4	0.45			0.5

CAP. ( $\mu$ F)	4 vdc Surge 5v		6.3 vdc Surge 8v		10 vdc Surge 13v		16 vdc Surge 20v		25 vdc Surge 32v		35 vdc Surge 44v		50 vdc Surge 63v		
	SIZE	I/AC	SIZE	I/AC	SIZE	I/AC	SIZE	I/AC	SIZE	I/AC	SIZE	I/AC	SIZE	I/AC	
0.1													3X5	1	
													4X5	1.5	
0.15													3X5	1.8	
													4X5	2	
0.22													3X5	2.3	
													4X5	2.6	
0.33													3X5	3	
													4X5	3.2	
0.47													3X5	3.5	
													4X5	3.8	
0.68													3X5	4.6	
													4X5	5	
1													3X5	5.6	
													4X5	6.2	
1.5													3X5	6.5	
													4X5	7	
2.2												3X5	7.5	3X5	8
												4X5	7.5	4X5	11
3.3															
4.7															
6.8															
10															
15															
22															
33															
47															
68															
100															
220															

I/AC (RIPPLE CURRENT) mA @ 120Hz 105°C