

# FUM SERIES

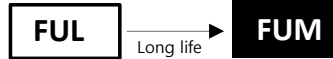
105°C, Long life, PCB terminal type

## Features

- 105°C, Long life, Snap-in terminal
- PCB Mounting
- No derating at high temperature
- High and stable quality
- Load life of 7,000 hours at 105°C

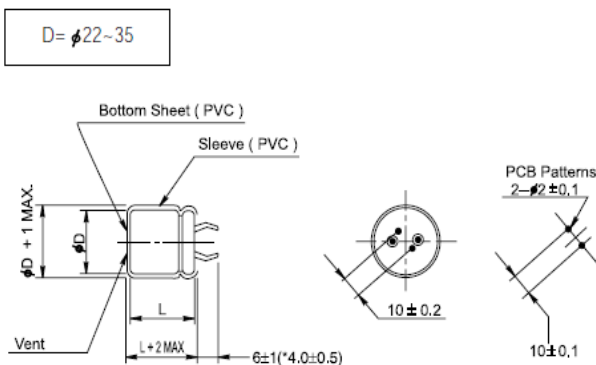


## Specifications



Item	Performance Characteristics	
Operating temperature range	-40°C ~ +105°C	-25°C ~ +105°C
Rated working voltage range	160V ~ 250V	350V ~ 500V
Nominal capacitance range	47 μF ~ 2,200 μF , ±20% (at 20°C, 120Hz)	
D.C Leakage current(at 20°C)	The following specifications shall be satisfied when the rated voltage is applied for the required time  I ≤ 0.02C or 3mA (5min), whichever is greater.  Where I = Leakage current(μA)    C = Nominal capacitance(μF)    V = Rated voltage (V)	
Tan δ (max., at 20°C, 120Hz)	W.V	160~500
	Tan δ	0.20
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	160~250
	Z-25°C/Z+20°C	4
Load life	After applying rated working voltage for 7,000 hours at +105°C and then listed being stabilized at +20°C, capacitors shall meet following limits.	
	Capacitance change	Within ± 25% of the initial measured value
	Tan δ	≤ 300% of the initial specified value
	Leakage current	≤ The initial specified value
Shelf life	After storage for 1,000hours at + 105°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.	
	Capacitance change	Within ± 20% of the initial measured value
	Tan δ	≤ 200% of the initial specified value
	Leakage current	≤ The initial specified value

## Dimensions



\* Shorter terminal is available upon request

## Ripple current coefficient

• Frequency

W.V(V) \ Freq(Hz)	50	120	1K	10K	100K
160~250	0.80	1.00	1.25	1.40	1.50
350~500	0.84	1.00	1.15	1.20	1.32

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## ▣ Dimensions & Maximum permissible ripple current

μF	V	160				200				250			
		Φ22	Φ25	Φ30	Φ35	Φ22	Φ25	Φ30	Φ35	Φ22	Φ25	Φ30	Φ35
220					22 x 25 0.80					22 x 30 0.93			
270					22 x 30 1.01					22 x 35 1.02	25 x 30 1.02		
330		22 x 25 1.08			22 x 30 1.12	25 x 25 1.12				22 x 40 1.18	25 x 30 1.13		
390		22 x 30 1.23			22 x 35 1.26	25 x 30 1.26				22 x 45 1.30	25 x 35 1.29	30 x 30 1.26	
470		22 x 30 1.29	25 x 30 1.28		22 x 40 1.40	25 x 35 1.36	30 x 25 1.39			22 x 50 1.43	25 x 40 1.46	30 x 30 1.43	
560		22 x 35 1.53	25 x 30 1.53		22 x 50 1.57	25 x 40 1.56	30 x 30 1.56				25 x 45 1.60	30 x 35 1.59	
680		22 x 40 1.67	25 x 35 1.70	30 x 30 1.66		25 x 45 1.65	30 x 35 1.62				25 x 50 1.85	30 x 40 1.87	35 x 30 1.84
820		22 x 50 1.81	25 x 35 1.93	30 x 30 1.80		25 x 50 1.84	30 x 40 1.82					30 x 45 2.01	35 x 35 1.97
1,000			25 x 40 2.09	30 x 35 2.08			30 x 45 2.28	35 x 35 2.20					35 x 40 2.28
1,200			25 x 45 2.36	30 x 40 2.38	35 x 30 2.34		30 x 50 2.49	35 x 40 2.48					35 x 45 2.54
1,500				30 x 45 2.78	35 x 35 2.71			35 x 45 2.83					
1,800				30 x 50 3.06	35 x 40 3.02			35 x 50 3.25					
2,200					35 x 45 3.63								

μF	V	350				400				450				500			
		Φ22	Φ25	Φ30	Φ35	Φ22	Φ25	Φ30	Φ35	Φ22	Φ25	Φ30	Φ35	Φ22	Φ25	Φ30	Φ35
47										22 x 25 0.43							
56										22 x 30 0.49				22 x 35 0.29			
68					22 x 25 0.53					22 x 30 0.54	25 x 25 0.54			22 x 40 0.35	25 x 30 0.36		
82					22 x 30 0.61					22 x 35 0.63	25 x 30 0.63			22 x 45 0.43	25 x 35 0.41		
100		22 x 25 0.65			22 x 30 0.67	25 x 25 0.67				22 x 40 0.70	25 x 30 0.68	30 x 25 0.69		22 x 50 0.50	25 x 40 0.49	30 x 30 0.48	
120		22 x 30 0.75	25 x 25 0.74		22 x 35 0.75	25 x 30 0.75				22 x 45 0.79	25 x 35 0.78	30 x 30 0.78			25 x 45 0.57	30 x 35 0.56	
150		22 x 35 0.86	25 x 30 0.86		22 x 40 0.84	25 x 30 0.82	30 x 25 0.84				25 x 40 0.86	30 x 35 0.88			25 x 50 0.67	30 x 40 0.67	35 x 30 0.65
180		22 x 40 0.95	25 x 30 0.92	30 x 25 0.94	22 x 45 0.95	25 x 35 0.97	30 x 30 0.97				25 x 45 1.00	30 x 35 0.99	35 x 30 1.01			30 x 45 0.80	35 x 35 0.79
220		22 x 45 1.04	25 x 35 1.03	30 x 30 1.03		25 x 40 1.02	30 x 35 1.04					30 x 40 1.14	35 x 35 1.15			30 x 50 0.90	35 x 40 0.90
270			25 x 40 1.14	30 x 35 1.16		25 x 50 1.22	30 x 40 1.23	35 x 30 1.21				30 x 50 1.21	35 x 40 1.20			30 x 60 1.05	35 x 50 1.03
330			25 x 45 1.30	30 x 35 1.32	35 x 30 1.35		30 x 45 1.36	35 x 35 1.34								35 x 45 1.50	35 x 60 1.22
390				30 x 40 1.50	35 x 35 1.51		30 x 50 1.43	35 x 40 1.42								35 x 50 1.53	
470				30 x 50 1.68	35 x 40 1.67			35 x 45 1.73									
560					35 x 40 1.86			35 x 50 2.00									
680					35 x 50 2.14	Case size : ΦD x L(mm) Maximum permissible ripple current[A(rms) at 105°C, 120Hz]											