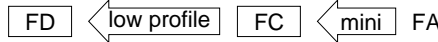


**105°C, mini. size (mid. and high voltage)**  
**105°C, mini. low profile (mid. and high voltage)**

**FC-FD**  
Series



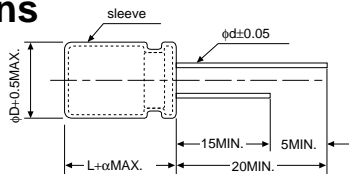
- FC series is mini. size (mid. and high voltage) model of FA series.
- FD series is low profile model of FC series.



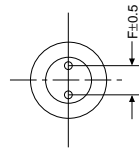
## Specifications

Items		Specifications					
Rated voltage (V)		160	200	250	350	400	450
Operating temperature range (°C)		-40 to +105					
Capacitance tolerance (%)		±20 (120Hz)					
Tangent of loss angle(tan δ)(MAX.)(120Hz)		0.20	0.20	0.20	0.25	0.25	0.25
Leakage current (L.C.) (μA/after 2min.)(MAX.)	CV≤1000	0.03CV+15					
	CV>1000	0.02CV+25					
Impedance (120Hz) ratio at low temperature (MAX.)	Z <sub>-25°C</sub> /Z <sub>20°C</sub>	3	3	3	4	6	6
	Z <sub>-40°C</sub> /Z <sub>20°C</sub>	6	6	6	8	10	-
High-temperature load rated voltage applied	Test	105°C 2000hrs. (φD≤8, 1000hrs.)					
	ΔC/C	Within ±20% of the initial value					
	tan δ	≤ Twice the initial standard					
	L.C.	≤ The initial standard					
Other characteristics		Conform to IEC 384-4					

## Dimensions



A pressure relief vent is attached to products over φD=8  
 α: L<20 α=1.5, L≥20 α=2.0



(unit : mm)

φD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8

## Size List

(φD×Lmm)

μF \ V	160		200		250		350		400		450	
0.47	5×11	7	5×11	8	5×11	8	6.3×11	10	6.3×11	10		
1.0	5×11	15	5×11	16	5×11	18	6.3×11	20	8×11.5	20	8×12.5	18
2.2	6.3×11	22	6.3×11	24	6.3×11	25	8×11.5	28	8×11.5	28	10×16	28
3.3	6.3×11	28	6.3×11	32	8×11.5	34	8×12.5	36	10×12.5	36	10×20	36
4.7	6.3×11	39	8×11.5	40	8×11.5	41	10×12.5	47	10×16	47	12.5×20	47
10	8×11.5	63	8×12.5	64	10×12.5	66	10×20	70	10×20	70	12.5×25 16×21	70
22	10×12.5	107	10×16	112	10×20	119	12.5×25 16×21	123	12.5×25 16×21	126	16×25 18×21	125
33	10×20	137	10×20	147	12.5×20	154	16×25 18×21	158	16×25 18×21	161	16×30 18×25	154
47	12.5×20	172	12.5×20	175	12.5×25 16×21	182	16×30 18×25	182	16×30 18×25	189	18×35.5	172
68	12.5×20	217	12.5×25 16×21	228	16×25 18×21	235	16×35.5 18×30.5	242	18×35.5	249	18×41	189
82	12.5×25 16×21	270	16×21	277	16×30 18×25	284	18×35.5	294	18×41	315		
100	12.5×25 16×21	287	16×25 18×21	301	16×35.5 18×25	302	18×41	308				
150	16×30 18×25	385	16×35.5 18×30.5	403	18×35.5	412						
220	16×35.5 18×30.5	522	18×35.5	532								
330	18×41	560										

Model No. Upper ; FC series. Lower ; FD series  
 FC series 160MV33FC 33μF, nominal capacitance 160V, rated voltage  
 FD series 450MV10FD 10μF, nominal capacitance 450V, rated voltage  
 Maximum permissible ripple current (mA r.m.s) at 120Hz, 105°C