

# Metallized film capacitor

**FPF SERIES**

Please request specifications for consideration.  
If you send the email to "Contact us", we will send it.

**High Current**

**Metallized PP film capacitor**

★ Performance

Item	Performance
Temperature range	-40~+105°C (Derate the Effective current at +100~+105°C)
Rated Voltage (U <sub>R</sub> )	250VDC, 450VDC, 630VDC
Capacitance range	0.01 ~ 10 μF
Capacitance tolerance	±5% (J)
Insulation resistance (IR)	C ≤ 0.33μF : ≥ 25000 MΩ C > 0.33μF : ≥ 7500 Ω · F Rated Voltage 250VDC 450VDC : 100 VDC for 1min Rated Voltage 630VDC : 500 VDC for 1min
tanδ	≤ 0.001 (1kHz)



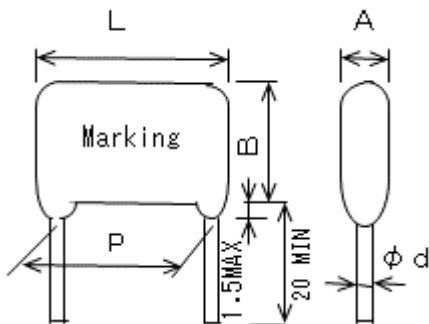
★ Standard dimensions table (FPF)

Parts cord	Rated voltage (V <sub>DC</sub> )	Capacitance (μF)	Cap. tolerance (%)	Dimensions (mm)						Permissible Current (Peak) I <sub>op</sub> (A)	Taping PCS/Package
				A max	B max	H max	L max	P ±0.75	φd		
FPF22E103J-F	250	0.01	±5	4.7	—	14.0	12.5	10.0	0.6	2.3	1500
FPF22E153J-F		0.015		5.0	—	15.0	12.5	10.0	0.6	3.3	1250
FPF22E223J-F		0.022		4.8	—	14.8	12.5	10.0	0.6	3.9	1250
FPF22E333J-F		0.033		5.8	—	16.2	12.5	10.0	0.6	6.0	1000
FPF22E473J-F		0.047		4.8	—	14.8	12.5	10.0	0.6	3.8	1250
FPF22E683J-F		0.068		4.7	—	14.6	12.5	10.0	0.6	4.5	1250
FPF22E104J-F		0.1		4.7	—	14.7	12.5	10.0	0.6	5.3	1500
FPF22E154J-F		0.15		4.9	—	16.3	12.5	10.0	0.6	7.9	1250
FPF22E224J-F		0.22		5.7	—	16.6	12.5	10.0	0.6	8.1	1250
FPF22E334J-F		0.33		6.6	—	17.6	12.5	10.0	0.6	12.2	1000
FPF22E474J-F		0.47		7.0	—	21.4	13.0	10.0	0.8	17.3	400
FPF22E684J		0.68		8.8	16.4	—	13.0	10.0	0.8	25.1	No taping
FPF22E105J		1.0		10.2	19.4	—	13.0	10.0	0.8	36.9	
FPF22E155J		1.5		12.7	18.9	—	15.5	12.5	0.8	29.2	
FPF22E225J		2.2		14.5	22.6	—	15.5	12.5	0.8	42.8	
FPF22E335J		3.3		13.7	22.3	—	20.5	17.5	0.8	40.2	
FPF22E475J		4.7		16.0	26.6	—	20.5	17.5	0.8	57.3	
FPF22E685J		6.8		19.8	29.9	—	20.5	17.5	0.8	82.9	
FPF22E106J		10		19.8	31.4	—	25.5	22.5	1.0	88.7	

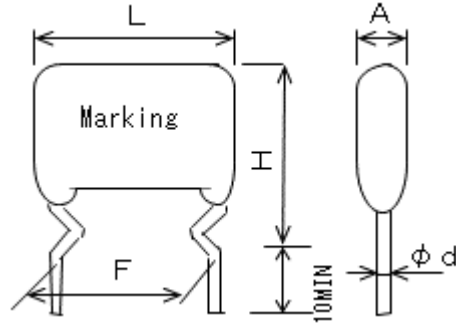
## Metallized film capacitor

Parts cord	Rated voltage (V <sub>DC</sub> )	Capacitance (μF)	Cap. tolerance (%)	Dimensions (mm)						Permissible Current (Peak) I <sub>op</sub> (A)	Taping PCS/Package
				A max	B max	H max	L max	P ±0.75	φd		
FPF22W103J-F	450	0.01	±5	4.7	—	14.0	12.5	10.0	0.6	2.3	1500
FPF22W153J-F		0.015		5.0	—	15.0	12.5	10.0	0.6	3.3	1250
FPF22W223J-F		0.022		4.8	—	14.8	12.5	10.0	0.6	3.9	1250
FPF22W333J-F		0.033		5.8	—	16.2	12.5	10.0	0.6	6.0	1000
FPF22W473J-F		0.047		4.8	—	14.8	12.5	10.0	0.6	3.8	1250
FPF22W683J-F		0.068		5.8	—	16.0	12.5	10.0	0.6	5.4	1250
FPF22W104J-F		0.1		6.6	—	17.6	12.5	10.0	0.6	7.9	1000
FPF22W154J-F		0.15		7.5	—	20.2	13.0	10.0	0.8	11.9	400
FPF22W224J		0.22		8.2	17.3	—	13.0	10.0	0.8	17.4	No taping
FPF22W334J		0.33		10.0	19.3	—	13.0	10.0	0.8	26.1	
FPF22W474J		0.47		11.4	18.1	—	15.5	12.5	0.8	26.1	
FPF22W684J		0.68		13.5	21.0	—	15.5	12.5	0.8	37.8	
FPF22W105J		1.0		12.3	21.3	—	20.5	17.5	0.8	34.9	
FPF22W155J		1.5		15.2	25.0	—	20.5	17.5	0.8	52.3	
FPF22W225J		2.2		19.5	28.0	—	20.5	17.5	0.8	76.6	
FPF22W335J		3.3		19.5	31.1	—	25.5	22.5	1.0	83.6	
FPF22J103J-F		630		0.01	±5	4.7	—	14.0	12.5	10.0	0.6
FPF22J153J-F	0.015		5.0	—		15.0	12.5	10.0	0.6	3.3	1250
FPF22J223J-F	0.022		5.4	—		15.5	12.5	10.0	0.6	4.4	1250
FPF22J333J-F	0.033		6.3	—		16.5	12.5	10.0	0.6	6.7	1000
FPF22J473J-F	0.047		7.7	—		18.6	13.0	10.0	0.8	9.5	400
FPF22J683J-F	0.068		8.1	—		19.0	13.0	10.0	0.8	12.1	400
FPF22J104J-F	0.1		9.8	—		20.8	13.0	10.0	0.8	17.9	300
FPF22J154J	0.15		10.8	18.2		—	13.0	10.0	0.8	26.6	No taping
FPF22J224J	0.22		11.7	16.7		—	15.5	12.5	0.8	18.5	
FPF22J334J	0.33		14.0	21.0		—	15.5	12.5	0.8	27.8	
FPF22J474J	0.47		14.6	21.2		—	18.0	15.0	0.8	22.5	
FPF22J684J	0.68		15.9	26.5		—	18.0	15.0	0.8	32.5	
FPF22J105J	1.0		15.9	26.5		—	23.0	20.0	0.8	32.3	
FPF22J155J	1.5	19.6	30.4	—	23.0	20.0	1.0	48.5			
FPF22J225J	2.2	20.0	32.5	—	28.0	25.0	1.0	53.7			

### ■ Component outline



### Example of forming type (-F)



# Metallized film capacitor

FPF

## AC Voltage

Table - 3

Rated Voltage	AC Voltage ※1 (50/60Hz)	※1
250 VDC	125 VAC	Permit +10% for voltage change Do not use the capacitor at primary side of power supply.
450 VDC	200 VAC	
630 VDC	250 VAC	

## Maximum operating voltage at operating temperature

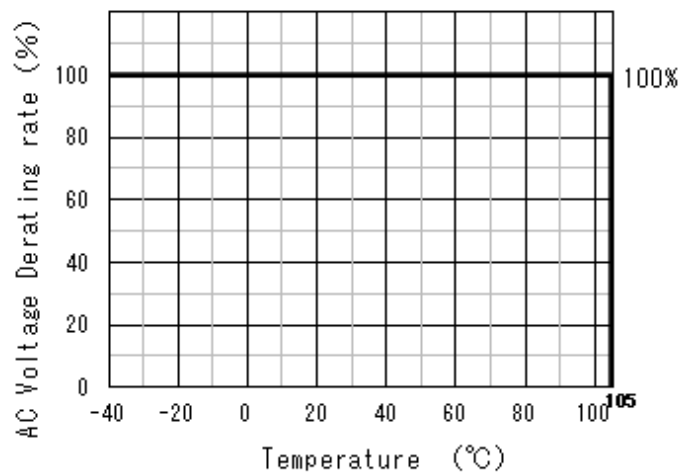
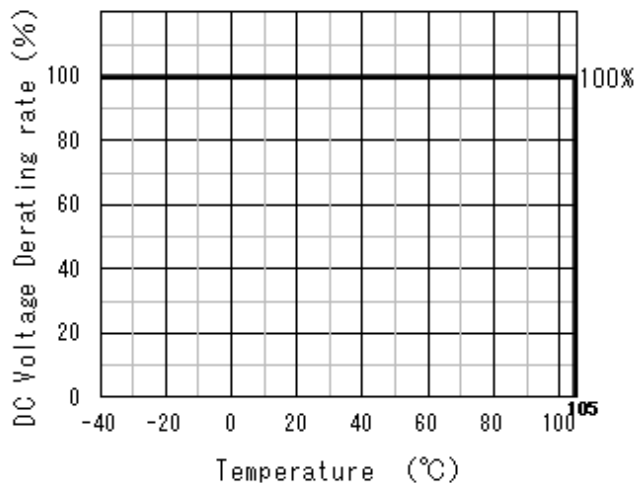
Note: Derate the effective current at +100~+105°C.

$$\text{Derating (\%)} = \frac{\text{Maximum operating voltage}}{\text{Rated voltage}} \times 100$$

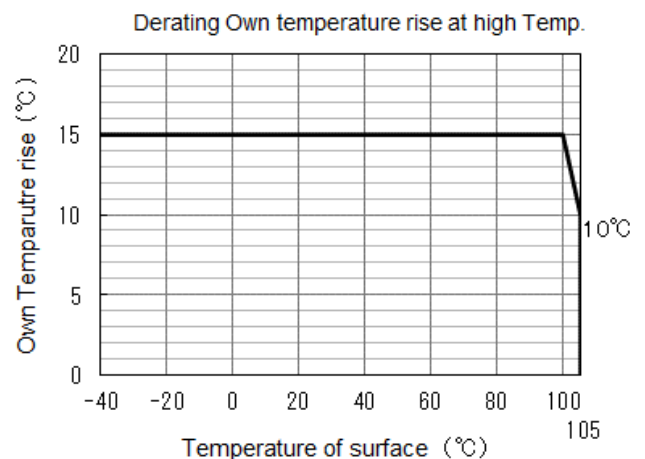
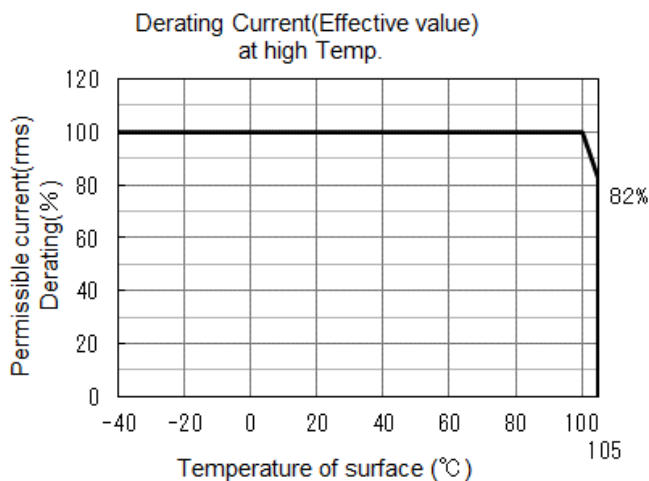
For DC

For AC

AC voltage is shown in table-3

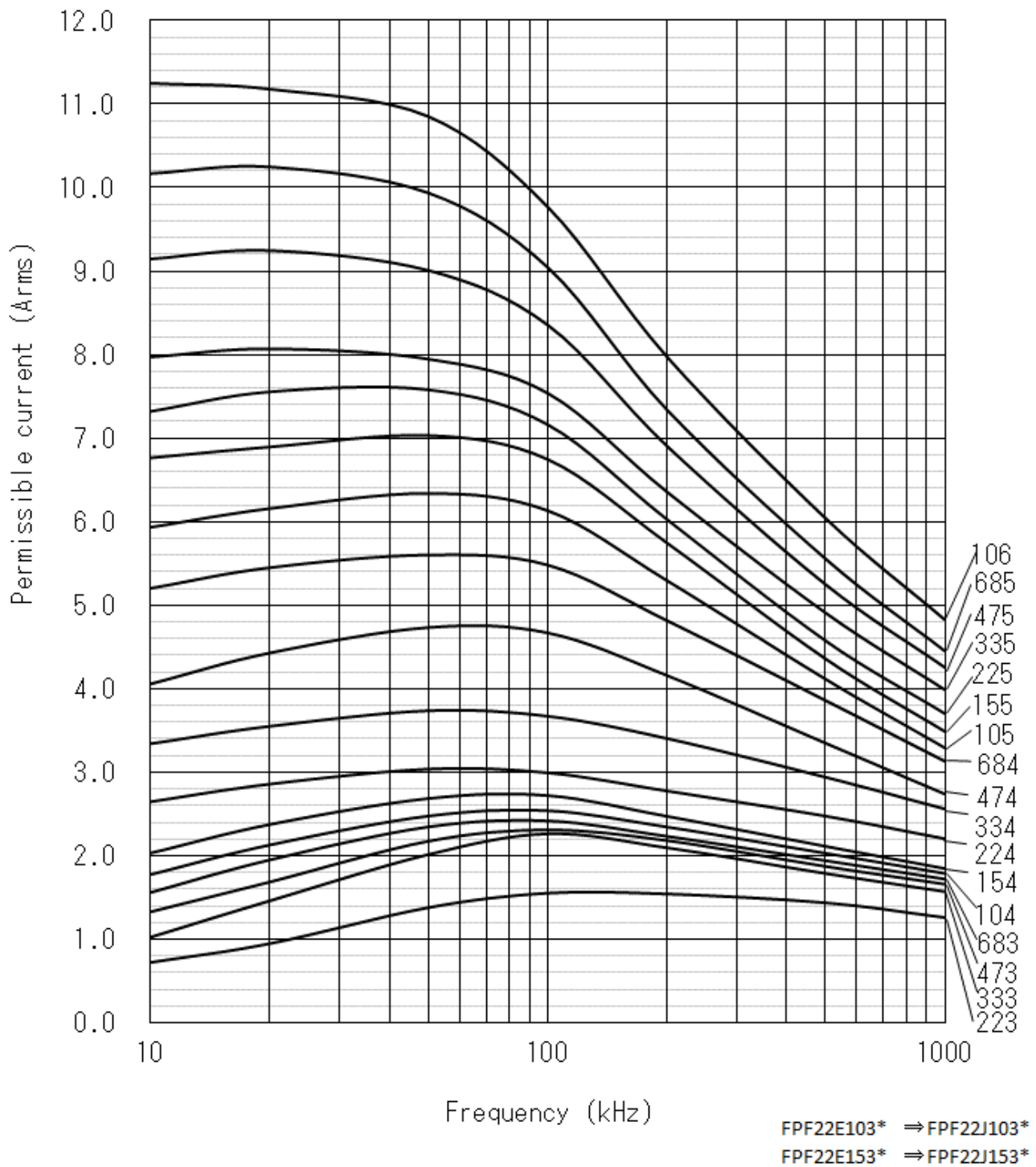


Temperature:  
Capacitor surface temperature



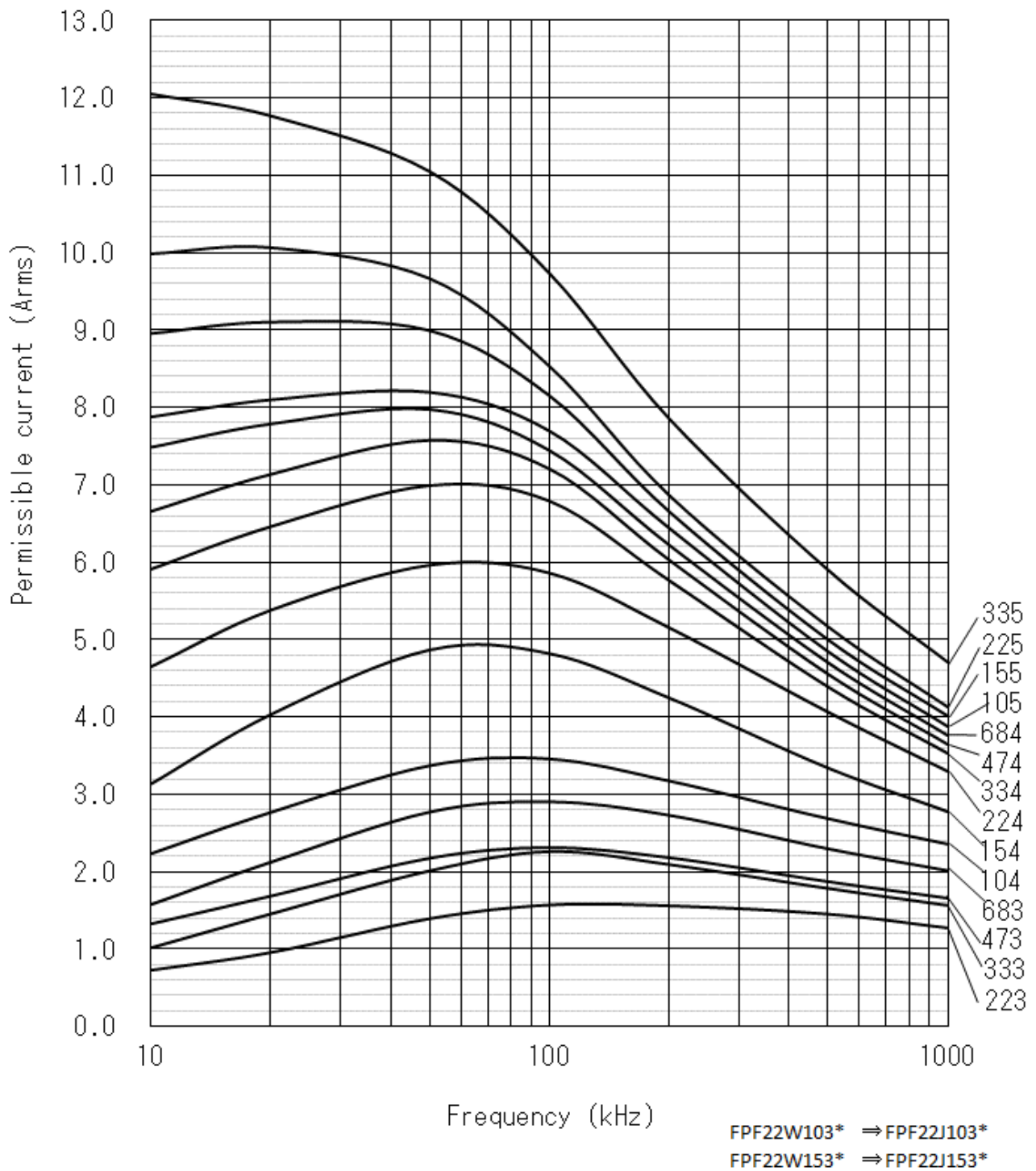
# Metallized film capacitor

## Permissible current (Effective value) vs Frequency FPF 250V



# Metallized film capacitor

## Permissible current (Effective value) vs Frequency FPF 450V



# Metallized film capacitor

## Permissible current (Effective value) vs Frequency FPF 630V

