

Metallized film capacitor

FPT SERIES

High Temperature ($\sim +125^{\circ}\text{C}$)

★ Performance

Item	Performance
Temperature range	$-40 \sim +105^{\circ}\text{C}$ ($+125^{\circ}\text{C}$) ($+105^{\circ}\text{C} \sim +125^{\circ}\text{C}$ Voltage derating) ($+120^{\circ}\text{C} \sim +125^{\circ}\text{C}$ Current derating)
Rated Voltage (U_R)	450, 630V _{DC}
Capacitance range	0.01 ~ 4.7 μF
Capacitance tolerance	$\pm 10\%$ (K), ($\pm 5\%$ (J))
Insulation resistance (IR)	$C \leq 0.33 \mu\text{F} : \geq 25000\text{M}\Omega$ $C > 0.33 \mu\text{F} : \geq 7500 \Omega \cdot \text{F}$ (450VDC: 100 VDC, 630VDC: 500 VDC for 1min)
tan δ	≤ 0.001 (1kHz)

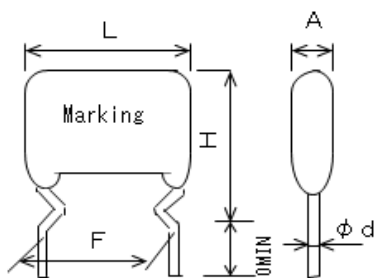
★ Standard dimensions table (FPT) (mm)

Parts cord	Rated voltage (V_{DC})	Capacitance (μF)	Cap. tolerance (%)	A max	B max	H max	L max	P, F ± 0.75	ϕd	Permissible Current (Peak) Iop (A)	Taping PCS/Package
FPT22W224K	450	0.22	± 10	8.0	13.2	—	12.5	10.0	0.6	11.7	400
FPT22W334K		0.33		8.5	16.8	—	12.5	10.0	0.6	17.4	—
FPT22W474K		0.47		8.0	15.5	—	18.0	15.0	0.8	14.0	400
FPT22W684K		0.68		9.0	17.5	—	18.0	15.0	0.8	20.3	—
FPT22W105K		1.0		11.0	20.0	—	18.0	15.0	0.8	29.8	
FPT22W155K		1.5		11.0	19.5	—	25.5	22.5	0.8	27.7	
FPT22W225K		2.2		12.0	24.5	—	25.5	22.5	0.8	40.5	
FPT22W335K		3.3		17.0	26.5	—	25.5	22.5	0.8	60.8	
FPT22W475K		4.7		19.5	32.0	—	25.5	22.5	0.8	86.5	
FPT22J103K-F		630		0.01	± 10	4.7	—	14.0	12.5	10.0	0.6
FPT22J153K-F	0.015		5.0	—		15.0	12.5	10.0	0.6	1.9	1250
FPT22J223K-F	0.022		4.8	—		14.8	12.5	10.0	0.6	2.2	1250
FPT22J333K-F	0.033		5.8	—		16.2	12.5	10.0	0.6	3.4	1000
FPT22J473K	0.047		6.0	11.1		—	12.5	10.0	0.6	3.8	500
FPT22J683K	0.068		7.0	12.1		—	12.5	10.0	0.6	5.5	500
FPT22J104K	0.1		8.0	13.9		—	12.5	10.0	0.6	8.1	400
FPT22J154K	0.15		9.7	15.6		—	12.5	10.0	0.6	12.1	300
FPT22J224K	0.22		11.4	18.1		—	12.5	10.0	0.6	17.7	—
FPT22J334K	0.33		10.1	16.8		—	18.0	15.0	0.8	13.8	
FPT22J474K	0.47		11.6	19.1		—	18.0	15.0	0.8	19.7	
FPT22J684K	0.68		14.2	22.8		—	18.0	15.0	0.8	28.5	
FPT22J105K	1.0		12.4	23.3		—	25.5	22.5	0.8	25.0	
FPT22J155K	1.5		17.1	25.6		—	25.5	22.5	0.8	37.5	
FPT22J225K	2.2		18.8	31.2		—	25.5	22.5	0.8	55.1	

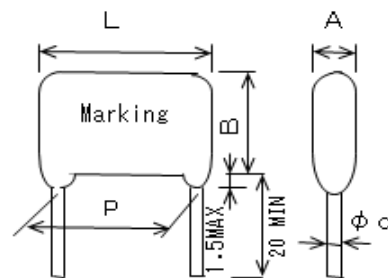
→ Capacitance tolerance J ($\pm 5\%$) is also available

※ 630VDC 0.01~0.033 μF ⇒ Please use forming type !

Component outline 630VDC 0.01~0.033 μF



450V 0.22~4.7 μF 630V 0.047~2.2 μF

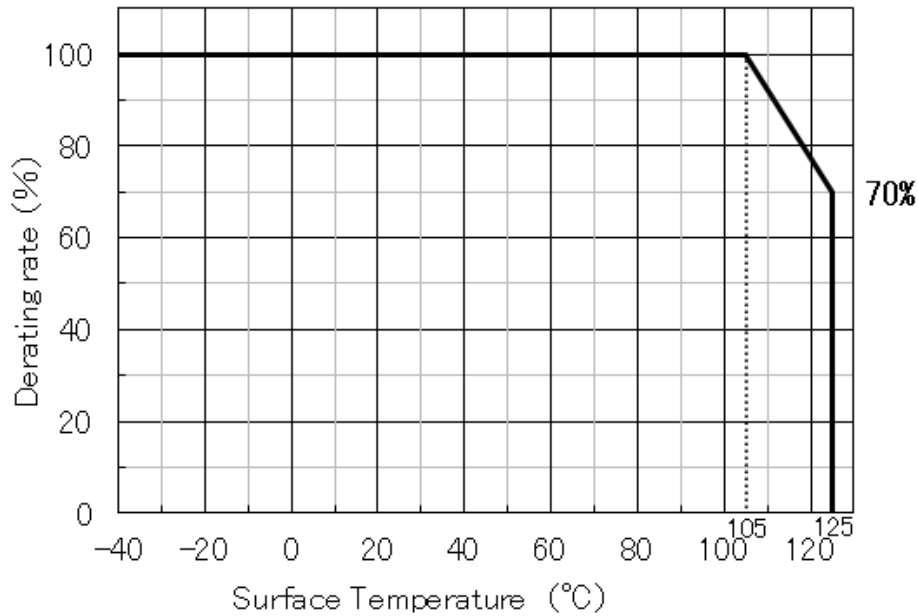


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Voltage derating

Temperature: **Capacitors surface Temperature**

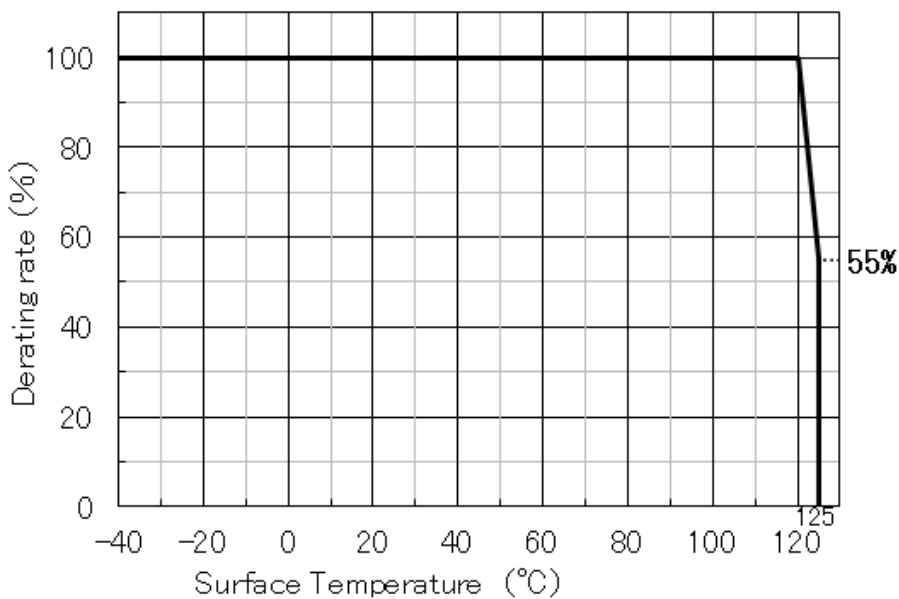
$$\text{Derating rate (\%)} = \frac{\text{Max operating voltage}}{\text{Rated voltage}} \times 100$$



Current derating (Effective current)

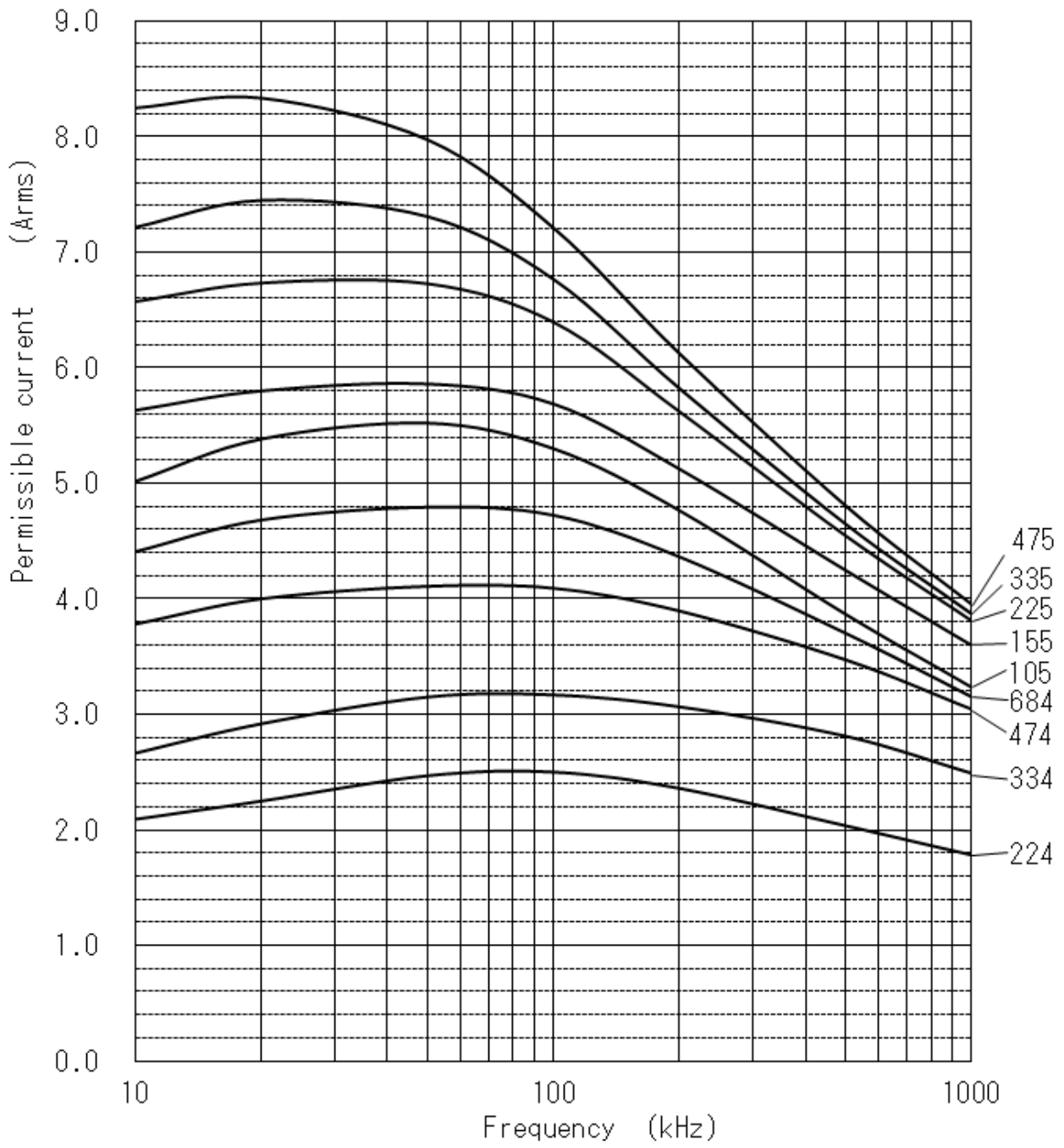
Temperature: **Capacitors surface Temperature**

$$\text{Derating rate (\%)} = \frac{\text{Max operating effective current}}{\text{Permissible effective current}} \times 100$$



Metallized film capacitor

Permissible current (Effective value) vs Frequency FPT 450VDC



Metallized film capacitor

Permissible current (Effective value) vs Frequency FPT 630VDC

