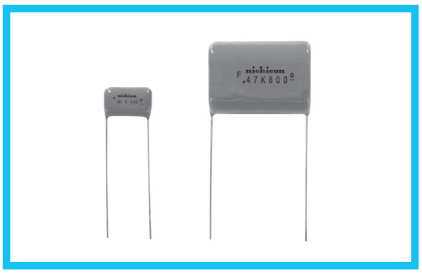
nichicon

QXP

Metallized Polypropylene Film Capacitor

(For High Frequency Applications)

For High Frequency



- Ideal for high frequency applications due to a metallized polypropylene film dielectric which exhibits superior operative characteristics with minimal loss at high frequency.
- Self-healing electrode and non-inductive construction provide excellent characteristics in minimal inductance having better with standing voltage capability.
- Finished by inner dipping with liquid epoxy resin and outer coating with flame-retardant epoxy resin, those double coating gives superior characteristics against moisture.
- Compliant to the RoHS directive (2011/65/EU).

Application

- High frequency circuit, general electronic circuit and etc.

Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +105˚C (Rated temperature : 85˚C)
Rated Voltage (U_R)	250, 400, 630, 800VDC
Rated Capacitance Range	0.01 to 3.3μF
Capacitance Tolerance	±5% (J), ±10% (K)
Dielectric Loss Tangent	0.1% or less (at 1kHz 20˚C)
Insulation Resistance	C ≦ 0.33μF : 30000 MΩ or more C > 0.33μF : 10000 ΩF or more
Withstand Voltage	Between Terminals : Rated Voltage × 175%, 1 to 5 secs. Between Terminals and Coverage : Rated Voltage × 200%, 1 to 5 secs.
Encapsulation	Flame retardant epoxy resin

Category voltage = U_R × 0.7

Type numbering system (Example : 630V 0.01μF)

F size	Code
12.5	7FL
17.5	7FP
22.5	7FT
27.5	7FX

1 2 3 4 5 6 7 8 9 10 11 12
Q X P 2 J 1 0 3 K R P T

- 12: AC usage applicable Straight lead type : T / AC usage applicable Cut / formed lead type :
- 10–11: Configuration (RP : Polypropylene, Tinned CP wire)
- 9: Capacitance tolerance (J : ±5% K : ±10%)
- 6–8: Rated capacitance (0.01μF)
- 4–5: Rated voltage (630V)
- 2–3: Series name
- 1: Type

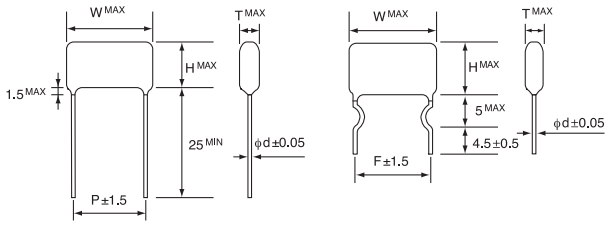
AC Voltage

- AC voltage (Operating at 50 / 60Hz AC circuit) shall be as follows However, do not use this product for across-the-line applications.

DC Rated Voltage	250VDC	400VDC	630VDC	800VDC
AC Voltage	125VAC	160VAC	200VAC	250VAC

- When used in high frequency circuit, refer to Table 2 and 5 for the values of effective voltage, current and effective VA, shown in pages 379, 382.

Drawing



Straight lead type. Cut / formed lead type.

Dimensions

Unit : mm

Cap.(μF)	Code \ V (Code) / Size	250VDC (2E)						400VDC (2G)						630VDC (2J)						800VDC (2K)					
		T	W	H	d	P	F	T	W	H	d	P	F	T	W	H	d	P	F	T	W	H	d	P	F
0.01	103													5.5	16.0	10.6	0.6	12.5	12.5	6.2	16.0	11.3	0.6	12.5	12.5
0.015	153													6.1	16.0	11.1	0.6	12.5	12.5	7.0	16.0	12.1	0.6	12.5	12.5
0.022	223							5.8	16.0	10.4	0.6	12.5	12.5	6.8	16.0	11.8	0.6	12.5	12.5	8.0	16.0	13.1	0.6	12.5	12.5
0.033	333							6.5	16.0	11.6	0.6	12.5	12.5	7.5	16.0	12.2	0.6	12.5	12.5	7.1	21.0	12.8	0.6	17.5	17.5
0.047	473	5.6	16.0	10.6	0.6	12.5	12.5	7.2	16.0	12.3	0.6	12.5	12.5	6.7	21.0	12.4	0.6	17.5	17.5	7.5	21.0	14.8	0.6	17.5	17.5
0.068	683	6.1	16.0	11.2	0.6	12.5	12.5	8.2	16.0	13.3	0.6	12.5	12.5	7.1	21.0	14.4	0.6	17.5	17.5	8.7	21.0	15.9	0.6	17.5	17.5
0.1	104	6.8	16.0	11.9	0.6	12.5	12.5	7.6	21.0	12.7	0.6	17.5	17.5	8.2	21.0	15.4	0.6	17.5	17.5	9.6	21.0	18.5	0.6	17.5	17.5
0.15	154	7.7	16.0	12.8	0.6	12.5	12.5	8.6	21.0	14.3	0.6	17.5	17.5	9.6	21.0	16.9	0.6	17.5	17.5	9.6	26.5	19.0	0.8	22.5	22.5
0.22	224	7.4	21.0	12.4	0.6	17.5	17.5	9.2	21.0	16.5	0.6	17.5	17.5	9.0	26.5	18.3	0.8	22.5	22.5	11.5	26.5	20.8	0.8	22.5	22.5
0.33	334	8.5	21.0	13.6	0.6	17.5	17.5	11.1	21.0	18.3	0.6	17.5	17.5	10.7	26.5	20.1	0.8	22.5	22.5	12.1	31.5	21.5	0.8	27.5	27.5
0.47	474	9.4	21.0	15.1	0.6	17.5	17.5	10.4	26.5	19.7	0.8	22.5	22.5	11.1	31.5	20.4	0.8	27.5	27.5	13.7	31.5	24.7	0.8	27.5	27.5
0.68	684	10.3	21.0	17.5	0.6	17.5	17.5	12.3	26.5	21.6	0.8	22.5	22.5	13.2	31.5	22.5	0.8	27.5	27.5						
1.0	105	9.9	26.5	19.2	0.8	22.5	22.5	13.0	31.5	22.3	0.8	27.5	27.5												
1.5	155	11.8	26.5	21.2	0.8	22.5	22.5	14.9	31.5	25.9	0.8	27.5	27.5												
2.2	225	12.6	31.5	21.9	0.8	27.5	27.5																		
3.3	335	14.5	31.5	25.4	0.8	27.5	27.5																		

F : lead pitch for cut / formed lead wires

※We can also custom-make.

Since rating other than the above can be manufactured, please ask for detail.