# PLASTIC FILM CAPACITORS

# Metallized Polyester Film Capacitor

# (Z| (Extended Standard Type)

- Highly reliable and superior performance in high frequency applications, self-healing and non-inductive construction, using a dielectric made of polyethylene terephthalate film covered with vacuum-evaporated metal.
- Finished by inner dipping with liquid epoxy resin and outer coating with flame-retardant epoxy resin, those double coating provides excellent humidity resistance.
- Designed to be compact and to cover larger capacitance range having advantage of tolerating to A.C.voltage and large current flow.
- Designed 1mm max. of epoxy on lead wire for best performance at soldering process on P.C. board assemblies.
- Compliant to the RoHS directive (2011/65/EU).

#### Applications

- Filtering, DC-blocking, coupling and so on of general communications equipment and use in AC circuits for motor starting, charging / discharging, lighting, noise suppression and etc. Contact us for details for use in AC circuits.
- · However, do not use this product for across-the-line applications.

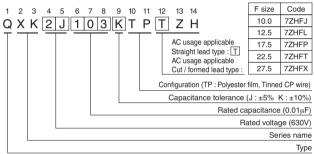
### Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +105°C (Rated temperature : 85°C)							
Rated Voltage (U <sub>R</sub> )	250, 400, 630VDC							
Rated Capacitance Range	0.01 to 3.3µF							
Rated Capacitance Tolerance	±5% (J), ±10% (K)							
Dielectric Loss Tangent	0.8% or less (at 1kHz 20°C)							
Insulation Resistance	$\label{eq:constraint} C \leqq 0.33 \mu F: 9000 \ \text{M}\Omega \ \text{or more}  C > 0.33 \mu F: 3000 \ \Omega F \ \text{or more}$							
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 = UR × 0.7

nichicon

# Type numbering system (Example : 630V 0.01µF)

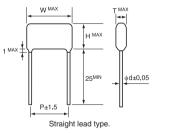


## AC Voltage

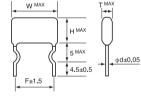
• AC voltage (Operating at 50 / 60Hz AC circuit) shall be as follows. However, do not use this product for across-the-line applications.

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

• When used in high frequency circuit, refer to Table 2 and 3 in pages 378, 381 for the values of effective voltage, current and effective VA.



Drawing



Cut / formed lead type

#### Dimensions

Dimensions Unit : mm																				
	V(Code)	250VDC (2E)						400VDC (2G)						630VDC (2J)						
Cap.(µF) Co	Size Size	Т	W	н	d	Р	F	Т	W	Н	d	Р	F	Т	W	Н	d	Р	F	
0.01	103													4.8	15.5	9.4	0.6	12.5	12.5	
0.015	153													5.5	15.5	10.0	0.6	12.5	12.5	
0.022	223							4.9	13.5	9.5	0.6	10.5	10.0	6.3	15.5	10.8	0.6	12.5	12.5	
0.033	333							5.6	13.5	10.2	0.6	10.5	10.0	7.1	15.5	12.3	0.6	12.5	12.5	
0.047	473	4.7	13.5	9.3	0.6	10.5	10.0	5.5	15.5	10.1	0.6	12.5	12.5	6.2	20.5	11.5	0.6	17.5	17.5	
0.068	683	4.7	13.5	9.3	0.6	10.5	10.0	6.3	15.5	10.9	0.6	12.5	12.5	6.7	20.5	13.5	0.6	17.5	17.5	
0.1	104	5.3	13.5	9.9	0.6	10.5	10.0	7.3	15.5	11.9	0.6	12.5	12.5	7.8	20.5	14.6	0.6	17.5	17.5	
0.15	154	5.5	15.5	10.1	0.6	12.5	12.5	6.6	20.5	11.8	0.6	17.5	17.5	8.0	26.0	15.3	0.8	22.5	22.5	
0.22	224	6.3	15.5	10.9	0.6	12.5	12.5	7.7	20.5	12.9	0.6	17.5	17.5	8.9	26.0	17.6	0.8	22.5	22.5	
0.33	334	7.4	15.5	12.0	0.6	12.5	12.5	8.6	20.5	15.3	0.6	17.5	17.5	10.9	26.0	19.8	0.8	22.5	22.5	
0.47	474	6.7	20.5	11.9	0.6	17.5	17.5	10.1	20.5	16.9	0.6	17.5	17.5	11.3	31.0	20.2	0.8	27.5	27.5	
0.68	684	7.2	20.5	14.0	0.6	17.5	17.5	9.5	26.0	18.4	0.8	22.5	22.5							
1.0	105	8.6	20.5	15.3	0.6	17.5	17.5	11.5	26.0	20.4	0.8	22.5	22.5							
1.5	155	8.3	26.0	17.1	0.8	22.5	22.5	12.3	31.0	21.1	0.8	27.5	27.5							
2.2	225	10.0	26.0	18.8	0.8	22.5	22.5													
3.3	335	10.7	31.0	19.6	0.8	27.5	27.5													

F : lead pitch for cut / formed lead wires

