@ 225 K



Metallized Polyester Film Capacitor



(Extended Standard Type)

- Highly reliable and superior performance in high frequency applications, self-healing and noninductive construction, using a dielectric made of polyethylene terephthalate film covered with vacuum-evaporated metal.
- Large capacitance in small dimensions.
- Finished by inner dipping with liquid epoxy resin and outer coating with flame-retardant epoxy resin, those double coating provides excellent humidity resistance.
- 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,(EU)2015/863).

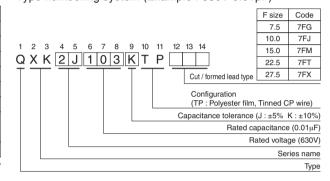
- General electronic and communications equipment. Contact us for details for use in AC circuits.
- However, do not use this product for across-the-line applications.

### 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 10μF							
Capacitance Tolerance	±5% (J) × , ±10% (K)							
Dielectric Loss Tangent	0.8% or less (at 1kHz 20°C)							
Insulation Resistance	$C \leqq 0.33 \mu F$ : 9000 $M\Omega$ or more	$C > 0.33 \mu F$ : 3000 $\Omega F$ or more						
Withstand Voltage	Between Terminals Between Terminals and Coverage	: Rated Voltage × 175%, 1 to 5 secs : Rated Voltage × 200%, 1 to 5 secs						
Encapsulation	Flame retardant epoxy resin							

※ Except for 250VDC 0.01 to 0.15μF 400VDC 0.01 to 0.033μF Category voltage = UR × 0.7

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



## AC Voltage

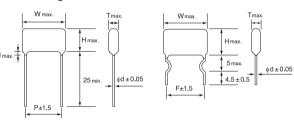
#### AC Voltage (Operating at 50 / 60Hz AC circuit)

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

<sup>\*</sup>When operating capacitors in the high frequency circuit, maximum permissible value (VAC) can be calculated from table 2, provided that the effective current (le) and the effective VA (Ve x Ve) shall not exceed the values specified in table 4. Shown in the Guidelines for Plastic Film Capacitors

### Drawing



Straight lead type.

Cut / formed lead type.

																	Ur	nit : mm
V(Code)			250VD	C (2E)			400VDC (2G)					630VDC (2J)						
Code Size	Т	W	Н	d	Р	F	Т	W	Н	d	Р	F	Т	W	Н	d	Р	F
103	4.4	11.0	8.1	0.6	7.5	7.5	4.4	11.0	8.1	0.6	7.5	7.5	4.4	13.5	9.5	0.6	10.0	10.0
153	5.0	11.0	8.7	0.6	7.5	7.5	5.0	11.0	8.7	0.6	7.5	7.5	4.7	13.5	9.8	0.6	10.0	10.0
223	4.4	11.0	8.5	0.6	7.5	7.5	4.3	11.0	8.4	0.6	7.5	7.5	5.1	13.5	10.8	0.6	10.0	10.0
333	4.4	11.0	8.5	0.6	7.5	7.5	4.9	11.0	9.1	0.6	7.5	7.5	5.9	13.5	11.6	0.6	10.0	10.0
473	4.0	11.0	8.1	0.6	7.5	7.5	4.7	13.5	9.8	0.6	10.0	10.0	6.4	13.5	13.7	0.6	10.0	10.0
683	4.7	11.0	8.7	0.6	7.5	7.5	5.4	13.5	10.5	0.6	10.0	10.0	5.8	18.5	11.5	0.6	15.0	15.0
104	5.2	11.0	9.4	0.6	7.5	7.5	6.1	13.5	11.7	0.6	10.0	10.0	6.4	18.5	13.7	0.6	15.0	15.0
154	6.1	11.0	10.3	0.6	7.5	7.5	5.1	18.5	12.4	0.6	15.0	15.0	7.1	18.5	15.9	0.6	15.0	15.0
224	5.9	13.5	11.0	0.6	10.0	10.0	5.9	18.5	13.2	0.6	15.0	15.0	9.6	18.5	15.3	0.6	15.0	15.0
334	6.7	13.5	12.4	0.6	10.0	10.0	7.6	18.5	13.3	0.6	15.0	15.0	7.9	25.5	16.7	0.8	22.5	22.5
474	5.5	18.5	12.8	0.6	15.0	15.0	8.3	18.5	15.6	0.6	15.0	15.0	9.4	25.5	18.2	0.8	22.5	22.5
684	6.0	18.5	14.8	0.6	15.0	15.0	7.2	25.5	16.1	0.8	22.5	22.5	11.3	25.5	20.1	0.8	22.5	22.5
105	7.1	18.5	16.0	0.6	15.0	15.0	8.7	25.5	17.6	0.8	22.5	22.5	12.0	30.5	21.0	0.8	27.5	27.5
155	9.9	18.5	15.6	0.6	15.0	15.0	9.4	30.5	18.5	0.8	27.5	27.5	14.8	30.5	23.8	0.8	27.5	27.5
225	8.1	25.5	17.0	0.8	22.5	22.5	11.5	30.5	20.5	0.8	27.5	27.5	18.5	30.5	28.0	0.8	27.5	27.5
335	10.0	25.5	18.8	0.8	22.5	22.5												
475	12.0	25.5	20.8	0.8	22.5	22.5												
685	12.7	30.5	21.8	0.8	27.5	27.5												
106	15.6	30.5	24.7	0.8	27.5	27.5												
	Code Size  103 153 223 333 473 683 104 154 224 334 474 684 105 155 225 335 475 685	Code         Size         T           103         4.4           153         5.0           223         4.4           333         4.4           473         4.0           683         4.7           104         5.2           154         6.1           224         5.9           334         6.7           474         5.5           684         6.0           105         7.1           155         9.9           225         8.1           335         10.0           475         12.0           685         12.7	Size         T         W           103         4.4         11.0           153         5.0         11.0           223         4.4         11.0           333         4.4         11.0           473         4.0         11.0           683         4.7         11.0           154         6.1         11.0           224         5.9         13.5           334         6.7         13.5           474         5.5         18.5           684         6.0         18.5           155         9.9         18.5           225         8.1         25.5           335         10.0         25.5           475         12.0         25.5           685         12.7         30.5	Code         Size         T         W         H           103         4.4         11.0         8.1           153         5.0         11.0         8.7           223         4.4         11.0         8.5           333         4.4         11.0         8.5           473         4.0         11.0         8.1           683         4.7         11.0         8.7           104         5.2         11.0         9.4           154         6.1         11.0         10.3           224         5.9         13.5         11.0           334         6.7         13.5         12.4           474         5.5         18.5         12.8           684         6.0         18.5         14.8           105         7.1         18.5         16.0           155         9.9         18.5         15.6           225         8.1         25.5         17.0           335         10.0         25.5         18.8           475         12.0         25.5         20.8           685         12.7         30.5         21.8	Code         T         W         H         d           103         4.4         11.0         8.1         0.6           153         5.0         11.0         8.7         0.6           223         4.4         11.0         8.5         0.6           333         4.4         11.0         8.5         0.6           473         4.0         11.0         8.1         0.6           683         4.7         11.0         8.7         0.6           104         5.2         11.0         9.4         0.6           154         6.1         11.0         10.3         0.6           224         5.9         13.5         11.0         0.6           334         6.7         13.5         12.4         0.6           474         5.5         18.5         12.8         0.6           684         6.0         18.5         14.8         0.6           155         9.9         18.5         15.6         0.6           225         8.1         25.5         17.0         0.8           335         10.0         25.5         18.8         0.8           475         1	Code         Size         T         W         H         d         P           103         4.4         11.0         8.1         0.6         7.5           153         5.0         11.0         8.7         0.6         7.5           223         4.4         11.0         8.5         0.6         7.5           333         4.4         11.0         8.5         0.6         7.5           473         4.0         11.0         8.1         0.6         7.5           683         4.7         11.0         8.7         0.6         7.5           104         5.2         11.0         9.4         0.6         7.5           154         6.1         11.0         10.3         0.6         7.5           224         5.9         13.5         11.0         0.6         10.0           334         6.7         13.5         12.4         0.6         10.0           474         5.5         18.5         12.8         0.6         15.0           684         6.0         18.5         14.8         0.6         15.0           155         9.9         18.5         15.6         0.6         <	Size         T         W         H         d         P         F           103         4.4         11.0         8.1         0.6         7.5         7.5           153         5.0         11.0         8.7         0.6         7.5         7.5           223         4.4         11.0         8.5         0.6         7.5         7.5           333         4.4         11.0         8.5         0.6         7.5         7.5           473         4.0         11.0         8.1         0.6         7.5         7.5           683         4.7         11.0         8.7         0.6         7.5         7.5           104         5.2         11.0         9.4         0.6         7.5         7.5           154         6.1         11.0         10.3         0.6         7.5         7.5           224         5.9         13.5         11.0         0.6         10.0         10.0           334         6.7         13.5         12.4         0.6         10.0         10.0           474         5.5         18.5         12.8         0.6         15.0         15.0           684	Size         T         W         H         d         P         F         T           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7           683         4.7         11.0         8.7         0.6         7.5         7.5         5.4           104         5.2         11.0         9.4         0.6         7.5         7.5         6.1           154         6.1         11.0         10.3         0.6         7.5         7.5         5.1           224         5.9         13.5         11.0         0.6         10.0         10.0         5.9           334         6.7         13.5         12.4         0.6         10.0         10.0         7.	Code         Size         T         W         H         d         P         F         T         W           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4         11.0           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0         11.0           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3         11.0           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9         11.0           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7         13.5           683         4.7         11.0         8.7         0.6         7.5         7.5         4.7         13.5           104         5.2         11.0         9.4         0.6         7.5         7.5         6.1         13.5           154         6.1         11.0         10.3         0.6         7.5         7.5         5.1         18.5           224         5.9         13.5         11.0         0.6         10.0 <t< td=""><td>Code         Size         T         W         H         d         P         F         T         W         H           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4         11.0         8.1           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0         11.0         8.7           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3         11.0         8.4           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9         11.0         9.1           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7         13.5         9.8           683         4.7         11.0         8.7         0.6         7.5         7.5         5.4         13.5         10.5           104         5.2         11.0         9.4         0.6         7.5         7.5         5.4         13.5         11.7           154         6.1         11.0         10.3         0.6         7.5         7.5         5.1</td><td>Code         Size         T         W         H         d         P         F         T         W         H         d           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4         11.0         8.1         0.6           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0         11.0         8.7         0.6           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3         11.0         8.4         0.6           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9         11.0         9.1         0.6           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7         13.5         9.8         0.6           683         4.7         11.0         8.7         0.6         7.5         7.5         5.4         13.5         10.5         0.6           104         5.2         11.0         9.4         0.6         7.5         7.5         5.1         18.5         12.4         0.6           154&lt;</td><td>Code         Size         T         W         H         d         P         F         T         W         H         d         P           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4         11.0         8.1         0.6         7.5           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0         11.0         8.7         0.6         7.5           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3         11.0         8.4         0.6         7.5           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9         11.0         9.1         0.6         7.5           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7         13.5         9.8         0.6         10.0           104         5.2         11.0         8.7         0.6         7.5         7.5         5.4         13.5         10.5         0.6         10.0           104         5.2         11.0         9.4         0.6         7.5&lt;</td><td>  T</td><td>  T</td><td>  T   W   H   d   P   F   T   W   H   d   T   T   T   T   T   T   T   T   T</td><td>  No.   Code   Size   T   W   H   d   P   F   T   W   H   d   P   F   T   W   H   d   P   F   T   W   H   H   D   D   D   D   D   D   D   D</td><td>  T</td><td>  T</td></t<>	Code         Size         T         W         H         d         P         F         T         W         H           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4         11.0         8.1           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0         11.0         8.7           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3         11.0         8.4           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9         11.0         9.1           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7         13.5         9.8           683         4.7         11.0         8.7         0.6         7.5         7.5         5.4         13.5         10.5           104         5.2         11.0         9.4         0.6         7.5         7.5         5.4         13.5         11.7           154         6.1         11.0         10.3         0.6         7.5         7.5         5.1	Code         Size         T         W         H         d         P         F         T         W         H         d           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4         11.0         8.1         0.6           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0         11.0         8.7         0.6           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3         11.0         8.4         0.6           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9         11.0         9.1         0.6           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7         13.5         9.8         0.6           683         4.7         11.0         8.7         0.6         7.5         7.5         5.4         13.5         10.5         0.6           104         5.2         11.0         9.4         0.6         7.5         7.5         5.1         18.5         12.4         0.6           154<	Code         Size         T         W         H         d         P         F         T         W         H         d         P           103         4.4         11.0         8.1         0.6         7.5         7.5         4.4         11.0         8.1         0.6         7.5           153         5.0         11.0         8.7         0.6         7.5         7.5         5.0         11.0         8.7         0.6         7.5           223         4.4         11.0         8.5         0.6         7.5         7.5         4.3         11.0         8.4         0.6         7.5           333         4.4         11.0         8.5         0.6         7.5         7.5         4.9         11.0         9.1         0.6         7.5           473         4.0         11.0         8.1         0.6         7.5         7.5         4.7         13.5         9.8         0.6         10.0           104         5.2         11.0         8.7         0.6         7.5         7.5         5.4         13.5         10.5         0.6         10.0           104         5.2         11.0         9.4         0.6         7.5<	T	T	T   W   H   d   P   F   T   W   H   d   T   T   T   T   T   T   T   T   T	No.   Code   Size   T   W   H   d   P   F   T   W   H   d   P   F   T   W   H   d   P   F   T   W   H   H   D   D   D   D   D   D   D   D	T	T

F: lead pitch for cut / formed lead wires

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