nichicon

UPX

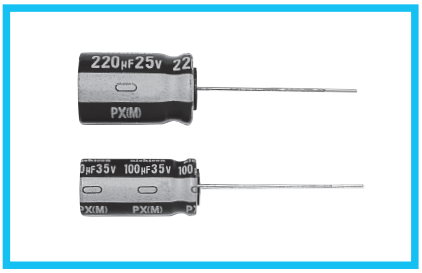
Long Life Assurance

Long Life | Low Impedance | Anti-Solvent Feature

- Load life of 20000 hours at 105°C.
- Compliant to the RoHS directive (2011/65/EU).

Products which are scheduled to be discontinued.
Not recommended for new designs

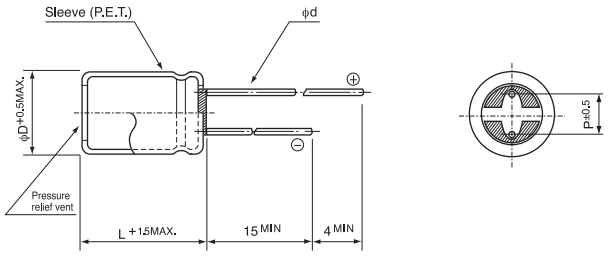
UPM Long Life UPX



Specifications

Item	Performance Characteristitcs					
Category Temperature Range	−55 to +105˚C					
Rated Voltage Range	10 to 35V					
Rated Capacitance Range	1 to 4700μF					
Capacitance Tolerance	±20% (120Hz, 20˚C)					
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 4 (μA), whichever is greater.					
Tangent of loss angle (tan δ)	Rated voltage (V)	10	16	25	35	Measurement frequency : 120Hz
	tan δ (MAX)	0.20	0.16	0.14	0.12	Temperature : 20˚C
	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF.					
Stability at Low Temperature	Rated voltage (V)		10	16	25	35
	Impedance ratio (MAX.)	Z−25˚C / Z+20˚C	3	2	2	2
		Z−40˚C / Z+20˚C	4	4	4	4
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20˚C after D.C. bias plus rated ripple current is applied for 20000 hours at 105˚C, the peak voltage shall not exceed the rated voltage.					
	Capacitance change	Within ±30% of the initial capacitance value				
	tan δ	300% or less than the initial specified value				
	Leakage current	Less than or equal to the initial specified value				
Shelf Life	After storing the capacitors under no load at 105˚C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.					
Marking	Printed with white color letter on dark brown sleeve.					

Radial Lead Type



(mm)

φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.6	0.8	0.8

• Please refer to page 20 about the end seal configuration.

Type numbering system (Example : 16V 220μF)

1	2	3	4	5	6	7	8	9	10	11
U	P	X	1	C	2	2	1	M	P	D

Configuration ※
Capacitance tolerance (±20%)
Rated capacitance (220μF)
Rated voltage (16V)
Series name
Type

※Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
10	PD
12.5 to 18	HD

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

● Dimension table in next page.

UPX

Dimensions

Cap. (μF)	V (Code) / Item / Code	10 (1A)		16 (1C)		25 (1E)		35 (1V)	
		Case size φD × L (mm)	Rated ripple (mArms) 105°C / 100kHz	Case size φD × L (mm)	Rated ripple (mArms) 105°C / 100kHz	Case size φD × L (mm)	Rated ripple (mArms) 105°C / 100kHz	Case size φD × L (mm)	Rated ripple (mArms) 105°C / 100kHz
1	010							10 × 12.5	59
2.2	2R2							10 × 12.5	84
3.3	3R3							10 × 12.5	101
4.7	4R7							10 × 12.5	143
10	100							10 × 12.5	294
22	220							10 × 12.5	336
33	330							10 × 12.5	378
47	470							10 × 12.5	420
100	101					10 × 12.5	420	10 × 20	672
220	221			10 × 16	504	12.5 × 20	840	12.5 × 25	1008
330	331	10 × 16	504	10 × 20	672	12.5 × 25	1008	16 × 25	1344
470	471	10 × 20	672	12.5 × 20	1008	16 × 25	1344	16 × 31.5	1680
1000	102	12.5 × 25	1008	16 × 25	1344	16 × 31.5	1680	18 × 40	2184
2200	222	16 × 31.5	1680	18 × 35.5	2016				
3300	332	18 × 35.5	2016	18 × 40	2184				
4700	472	18 × 40	2184						

• Frequency coefficient of rated ripple current

Frequency	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.75	0.80	0.90	1.00

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nichicon:

UPX1A102MHD UPX1A222MHD UPX1A331MPD UPX1A332MHD UPX1A471MPD UPX1V2R2MPD UPX1V330MPD UPX1V331MHD UPX1V3R3MPD UPX1V470MPD UPX1V471MHD UPX1V4R7MPD UPX1E221MHD UPX1E331MHD UPX1E471MHD UPX1V010MPD UPX1V100MPD UPX1V101MPD UPX1V102MHD UPX1V220MPD UPX1V221MHD UPX1A472MHD UPX1C102MHD UPX1C221MPD UPX1C222MHD UPX1C331MPD UPX1C332MHD UPX1C471MHD UPX1E101MPD UPX1E102MHD UPX1V101MPD1TD UPX1C331MPD1TD UPX1V220MPD1TD UPX1C471MHD1TO UPX1C221MPD1TD UPX1E101MPD1TD UPX1V100MPD1TD UPX1A331MPD1TD UPX1V2R2MPD1TD UPX1V470MPD1TD UPX1C102MHD1TN UPX1A471MPD1TD UPX1V010MPD1TD UPX1V331MHD1TN UPX1E331MHD1TO UPX1E221MHD1TO UPX1A102MHD1TO UPX1V221MHD1TO UPX1E471MHD1TN UPX1V4R7MPD1TD UPX1V330MPD1TD UPX1V3R3MPD1TD