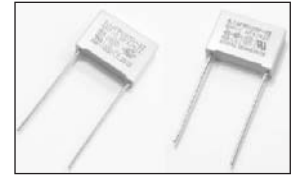


MOLDED BOX CONSTRUCTION, SUPPRESSION CAPACITOR, RADIAL LEAD

## FEATURES

- UL, CSA, VDE, CQC, CE, ENEC APPROVALS
- "X2" SAFETY CAP CLASSIFICATION FOR USE IN ACROSS-THE-LINE APPLICATIONS
- METALLIZED POLYPROPYLENE FILM
- NON-INDUCTIVE & SELF-HEALING CONSTRUCTION
- RoHS COMPLIANT & Pb-FREE FINISH
- MOLDED CASE MEETS UL-94V-0 FLAMMABILITY TEST



**NEW  
EXPANDED  
310VAC**

## SPECIFICATIONS

Operating Temperature	-40°C ~ +100°C
Rated Voltage	250VAC/275VAC/310V*
Capacitance Range	0.001μF ~ 1.0μF
Capacitance Tolerance	±10% (K), ±20% (M)
Insulation Resistance (min.)	C < 0.33μF IR ≥ 15,000 Megohm C ≥ 0.33μF IR ≥ 5,000 Megohm
Dissipation Factor	< 0.1% max. @ 1KHz/25°C
Dielectric Strength	2000VDC (1414VAC rms) for 1 second

\*250 VAC for UL & CSA  
275 VAC for UL, VDE, CQC, CE, ENEC  
310 VAC for UL

## DV/DT RATINGS

Capacitance Value (μF)	DV/DT (V/μS)
0.001	1,000
0.0015	600
0.0022 ~ 0.0047	450
0.0068 ~ 0.022	300
0.033 ~ 0.047	200
0.068 ~ 1.0	100

Meet the requirements of DIN EN132400 (VDO565 Teil 101):1999-06  
IEC60384-14:1993-07, Table II +A1:1995-06 and EN132400, UL1414, UL 60384-14/ CSA E60384-14/-1 CSA C22.2 No. 1 & 2

## 310V STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (μF)	Capacitance Code	L ±0.5	T ±0.5	H ±0.5	LS ±0.5#1	LD ±0.08	Bulk Package Quantity	Tape & Box Quantity		
NPX102K310VX2F	0.001	102	13.0	5.0	11.0	10.0	0.6	500	500		
NPX122K310VX2F	0.0012	122	13.0	5.0	11.0			500	500		
NPX152K310VX2F	0.0015	152	13.0	5.0	11.0			500	500		
NPX182K310VX2F	0.0018	182	13.0	5.0	11.0			500	500		
NPX222K310VX2F	0.0022	222	13.0	5.0	11.0			500	500		
NPX272K310VX2F	0.0027	272	13.0	5.0	11.0			500	500		
NPX332K310VX2F	0.0033	332	13.0	5.0	11.0			500	500		
NPX392K310VX2F	0.0039	392	13.0	5.0	11.0			500	500		
NPX472K310VX2F	0.0047	472	13.0	5.0	11.0			500	500		
NPX562K310VX2F	0.0056	562	13.0	5.0	11.0			500	500		
NPX682K310VX2F	0.0068	682	13.0	5.0	11.0			500	500		
NPX822K310VX2F	0.0082	822	13.0	5.0	11.0			500	500		
NPX103K310VX2MF	0.01	103	13.0	5.0	11.0	15.0	0.8	500	500		
NPX103K310VX2F			18.0	5.0	11.0			500	400		
NPX123K310VX2F	0.012	123	18.0	5.0	11.0			500	400		
NPX153K310VX2F	0.015	153	18.0	5.0	11.0			500	400		
NPX183K310VX2F	0.018	183	18.0	5.0	11.0			500	400		
NPX223K310VX2MF	0.022	223	13.0	5.0	11.0			10.0	0.6	500	500
NPX223K310VX2F			18.0	5.0	11.0			15.0	0.8	500	400
NPX273K310VX2MF	0.027	273	13.0	5.0	11.0			10.0	0.6	500	500
NPX273K310VX2F			18.0	5.0	11.0			15.0	0.8	500	400
NPX333K310VX2MF	0.033	333	13.0	5.0	11.0			10.0	0.6	500	500
NPX333K310VX2F			18.0	5.0	11.0			15.0	0.8	500	400
NPX393K310VX2F	0.039	393	18.0	5.0	11.0			15.0	0.8	500	400
NPX473K310VX2MF	0.047	473	13.0	5.0	11.0	10.0	0.6	500	500		
NPX473K310VX2F			18.0	5.0	11.0	15.0	0.8	500	400		
NPX563K310VX2MF	0.056	563	13.0	5.0	11.0	10.0	0.6	500	500		
NPX563K310VX2F			18.0	5.0	11.0	15.0	0.8	500	400		
NPX683K310VX2MF	0.068	683	13.0	5.0	11.0	10.0	0.6	500	500		
NPX683K310VX2F			18.0	5.0	11.0	15.0	0.8	500	400		
NPX823K310VX2MF	0.082	823	13.0	6.0	12.0	10.0	0.6	500	400		
NPX823K310VX2F			18.0	6.0	12.0	15.0	0.8	500	400		
NPX104K310VX2MF	0.1	104	13.0	6.0	12.0	10.0	0.6	500	400		
NPX104K310VX2M2F			18.0	5.0	11.0	15.0	0.8	500	400		
NPX104K310VX2F			18.0	6.0	12.0			500	400		

\*These value are not available tape & box  
#1 - ±0.4mm tolerance available special order

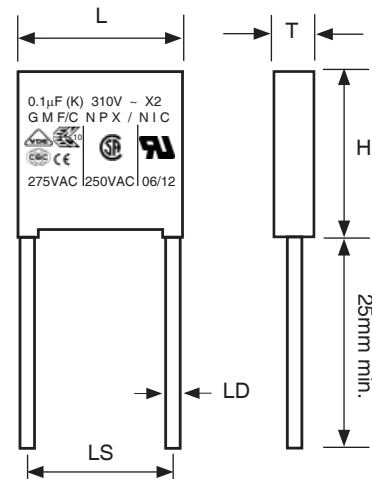
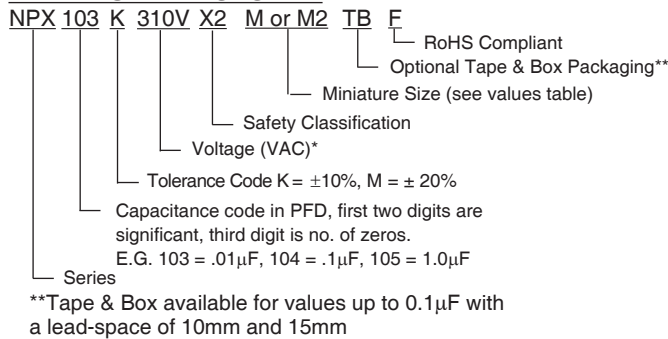


### STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (μF)	Capacitance Code	L ±0.5	T ±0.5	H ±0.5	LS ±0.5*1	LD ±0.08	Bulk Package Quantity	Tape & Box Quantity
NPX124K310VX2MF	0.12	124	18.0*	6.0	12.0			500	n/a
NPX154K310VX2MF	0.15	154	18.0*	6.2	13.0			500	n/a
NPX184K310VX2F	0.18	184	18.0*	8.5	14.5			250	n/a
NPX224K310VX2M2F	0.22	224	18.0*	6.2	13.0			500	n/a
NPX224K310VX2MF			18.0*	8.5	14.5			250	n/a
NPX224K310VX2F			26.5*	7.0	16.5			250	n/a
NPX274K310VX2F	0.27	274	26.5*	8.5	17.0			200	n/a
NPX334K310VX2MF	0.33	334	18.0*	10.0	16.0			250	n/a
NPX334K310VX2F			26.5*	8.5	17.0			200	n/a
NPX394K310VX2F	0.39	394	26.5*	10.0	19.0			150	n/a
NPX474K310VX2MF	0.47	474	18.0*	10.0	16.0			250	n/a
NPX474K310VX2M3F			26.5*	8.5	17.0			250	n/a
NPX474K310VX2M2F			26.5*	10.0	19.0			150	n/a
NPX564K310VX2M2F	0.56	564	18.0*	11.0	18.5			250	n/a
NPX564K310VX2MF			26.5*	10.0	19.0			150	n/a
NPX564K310VX2F			32.0*	11.0	20.0			100	n/a
NPX684K310VX2MF	0.68	684	26.5*	10.0	19.0			150	n/a
NPX684K310VX2F			32.0*	11.0	20.0			100	n/a
NPX824K310VX2M2F	0.82	824	18.0*	11.0	18.5			250	n/a
NPX824K310VX2MF			26.5*	12.0	21.5			100	n/a
NPX824K310VX2F			32.0*	13.0	22.0			100	n/a
NPX105K310VX2MF	1.0	105	26.5*	12.0	21.5			100	n/a
NPX105K310VX2M2F			32.0*	11.0	20.0			100	n/a
NPX105K310VX2F			32.0*	13.0	22.0			100	n/a

\*These value are not available tape & box  
 #1 - ±0.4mm tolerance available special order

### PART NUMBER SYSTEM



## 250V/275V STANDARD VALUES AND CASE SIZE (mm)

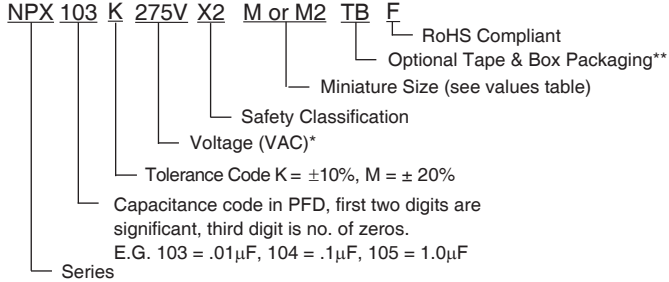
Part Number	Cap. Value (μF)	Capacitance Code	L ±0.5	T ±0.5	H ±0.5	LS ±0.5#1	LD ±0.08	Bulk Package Quantity	Tape & Box Quantity		
NPX102K275VX2F	0.001	102	13.0	5.0	11.0	10.0	0.6	500	500		
NPX122K275VX2F	0.0012	122	13.0	5.0	11.0			500	500		
NPX152K275VX2F	0.0015	152	13.0	5.0	11.0			500	500		
NPX182K275VX2F	0.0018	182	13.0	5.0	11.0			500	500		
NPX222K275VX2F	0.0022	222	13.0	5.0	11.0			500	500		
NPX272K275VX2F	0.0027	272	13.0	5.0	11.0			500	500		
NPX332K275VX2F	0.0033	332	13.0	5.0	11.0			500	500		
NPX392K275VX2F	0.0039	392	13.0	5.0	11.0			500	500		
NPX472K275VX2F	0.0047	472	13.0	5.0	11.0			500	500		
NPX562K275VX2F	0.0056	562	13.0	5.0	11.0			500	500		
NPX682K275VX2F	0.0068	682	13.0	5.0	11.0			500	500		
NPX822K275VX2F	0.0082	822	13.0	5.0	11.0			500	500		
NPX103K275VX2MF	0.01	103	13.0	5.0	11.0			15.0	0.8	500	500
NPX103K275VX2F			18.0	5.0	11.0					500	400
NPX123K275VX2F	0.012	123	18.0	5.0	11.0	500	400				
NPX153K275VX2F	0.015	153	18.0	5.0	11.0	500	400				
NPX183K275VX2F	0.018	183	18.0	5.0	11.0	500	400				
NPX223K275VX2MF	0.022	223	13.0	5.0	11.0	10.0	0.6			500	500
NPX223K275VX2F			18.0	5.0	11.0	15.0	0.8			500	400
NPX273K275VX2MF	0.027	273	13.0	5.0	11.0	10.0	0.6			500	500
NPX273K275VX2F			18.0	5.0	11.0	15.0	0.8			500	400
NPX333K275VX2MF	0.033	333	13.0	5.0	11.0	10.0	0.6			500	500
NPX333K275VX2F			18.0	5.0	11.0	15.0	0.8			500	400
NPX393K275VX2F	0.039	393	18.0	5.0	11.0	15.0	0.8			500	400
NPX473K275VX2MF	0.047	473	13.0	5.0	11.0	10.0	0.6			500	500
NPX473K275VX2F			18.0	5.0	11.0	15.0	0.8			500	400
NPX563K275VX2MF	0.056	563	13.0	5.0	11.0	10.0	0.6	500	500		
NPX563K275VX2F			18.0	5.0	11.0	15.0	0.8	500	400		
NPX683K275VX2MF	0.068	683	13.0	5.0	11.0	10.0	0.6	500	500		
NPX683K275VX2F			18.0	5.0	11.0	15.0	0.8	500	400		
NPX823K275VX2MF	0.082	823	13.0	6.0	12.0	10.0	0.6	500	400		
NPX823K275VX2F			18.0	6.0	12.0	15.0	0.8	500	400		
NPX104K275VX2MF	0.1	104	13.0	6.0	12.0	10.0	0.6	500	400		
NPX104K275VX2M2F			18.0	5.0	11.0	15.0	0.8	500	400		
NPX104K275VX2F			18.0	6.0	12.0			500	400		
NPX124K275VX2MF	0.12	124	18.0*	6.0	12.0			15.0	0.8	500	n/a
NPX124K275VX2F			18.0*	7.5	13.5	500	n/a				
NPX154K275VX2MF	0.15	154	18.0*	6.2	13.5	500	n/a				
NPX184K275VX2F	0.18	184	18.0*	8.5	14.5	250	n/a				
NPX224K275VX2MF	0.22	224	18.0*	8.5	14.5	250	n/a				
NPX224K275VX2F			26.5*	7.0	16.5	250	n/a				
NPX274K275VX2F	0.27	274	26.5*	8.5	17.0	22.5	200			n/a	
NPX334K275VX2MF	0.33	334	18.0*	10.0	16.0	15.0	250			n/a	
NPX334K275VX2F			26.5*	8.5	17.0	22.5	200			n/a	
NPX394K275VX2F	0.39	394	26.5*	10.0	19.0	22.5	150			n/a	
NPX474K275VX2MF	0.47	474	18.0*	10.0	16.0	15.0	250			n/a	
NPX474K275VX2M2F			26.5*	10.0	19.0	22.5	150			n/a	
NPX564K275VX2F	0.56	564	32.0*	11.0	20.0	27.5	100			n/a	
NPX684K275VX2MF	0.68	684	26.5*	10.0	19.0	22.5	150			n/a	
NPX684K275VX2F			32.0*	11.0	20.0	100	n/a				
NPX824K275VX2F	0.82	824	32.0*	13.0	22.0	27.5	100	n/a			
NPX105K275VX2MF	1.0	105	26.5*	12.5	21.5	22.5	100	n/a			
NPX105K275VX2F			32.0*	13.0	22.0	27.5	100	n/a			

**NOT RECOMMENDED FOR NEW DESIGNS  
(SEE 310V STANDARD VALUES TABLES)**

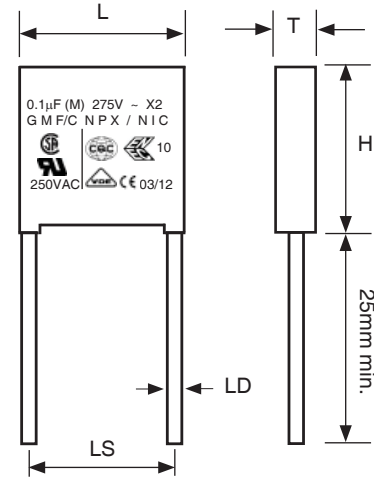
\*These value are not available tape & box  
#1 - ±0.4mm tolerance available special order



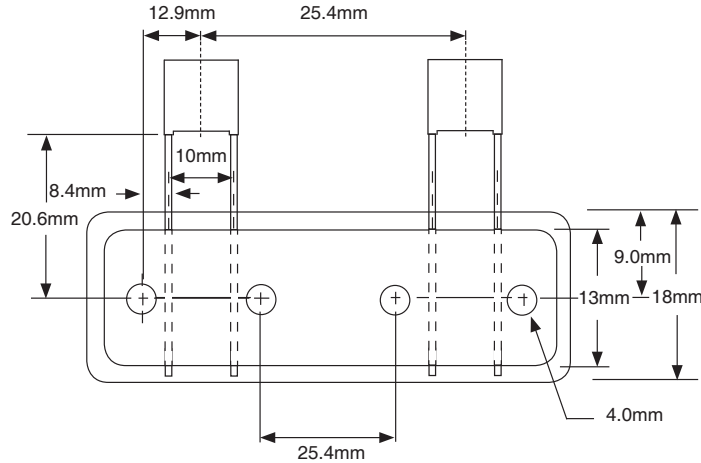
### PART NUMBER SYSTEM



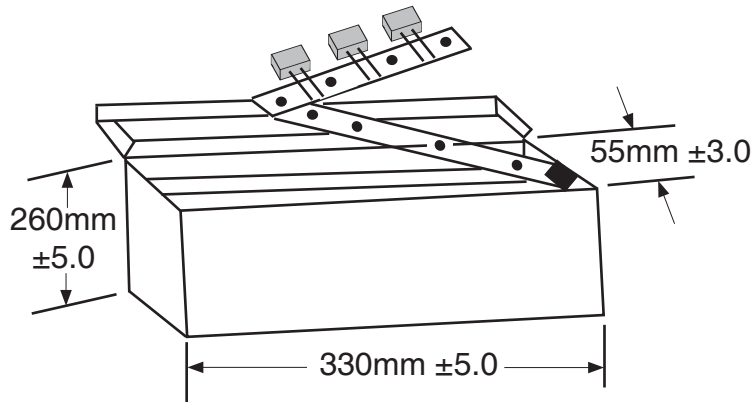
\*\*Tape & Box available for values up to 0.1 $\mu$ F with a lead-space of 10mm and 15mm



### AMMO PACK TAPING DIMENSIONS



### AMMO PACK BOX DIMENSIONS



# NPX SERIES INTERFERENCE SUPPRESSION CAPACITORS

## PRODUCT GUIDELINE

### PRODUCT TYPE:

X2 Interference Suppression Film Capacitors

Capacitance: 0.001 $\mu$ F ~ 1.0 $\mu$ F

Voltage: 250VAC ~ 310VAC



### FEATURES:

- UL, CSA, VDE, CQC, CE, ENEC Safety Recognition
- Non-Inductive & Self-Healing Construction
- RoHS Compliant & Pb-Free Finish
- Molded Cases Meets UL-94V-0 Flammability Test

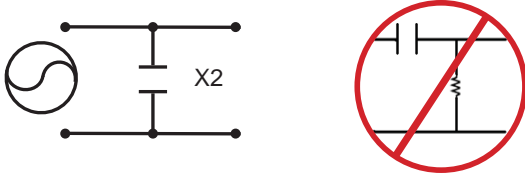
### SUGGESTED APPLICATIONS:

- Across-the-line Capacitor
- Antenna-coupling, Line-by-pass components
- Component-Electromagnetic interference filters
- Capacitor for electromagnetic interference
- Radio-interference capacitor
- Fixed capacitor for electromagnetic interference suppression and connection to the supply mains.
- Component-Electromagnetic interference filters

### NON-ENDORSED APPLICATIONS:

- Life Support & Safety Controls
- Aerospace & Aviation

The NPX series of X2 suppression capacitors are intended for across the line applications. Do not use them in series connection.



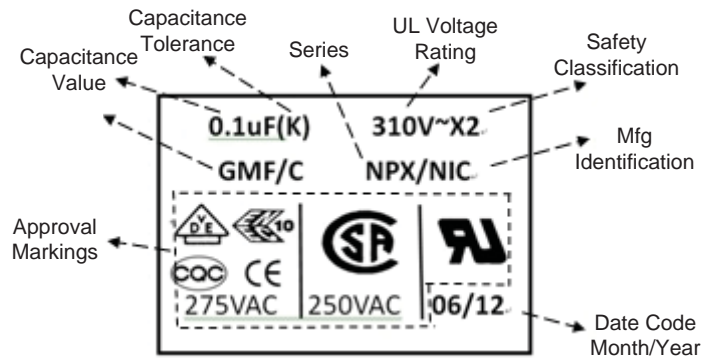
### ENVIRONMENT CLASSIFICATION:

- DIN EN60384-14 & CAN/CSA-E60384-14:09 GMF/C. (C: passive flammability category C) & UL60384-14 (Passive flammability category B)
- Minimum Limit Temperature: G = -40°C
- Maximum Limit Temperature: M = +100°C

### DV/DT RATINGS

Capacitance Value ( $\mu$ F)	DV/DT (V/ $\mu$ S)
0.001	1,000
0.0015	600
0.0022 ~ 0.0047	450
0.0068 ~ 0.022	300
0.033 ~ 0.047	200
0.068 ~ 1.0	100

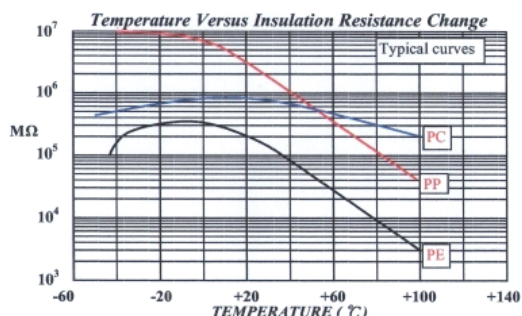
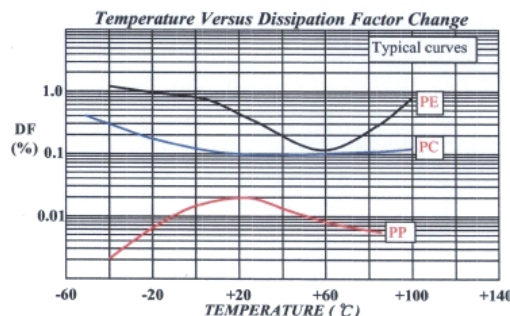
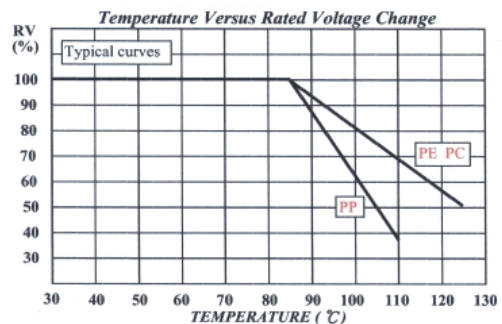
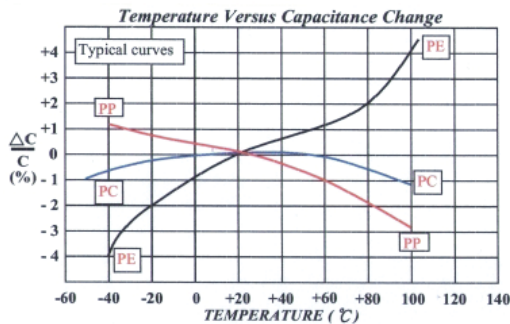
### MARKING GUIDE:



### NIC Support

If in doubt or uncertainty, please review your specific application - process details with NIC's technical support personnel  
 → [tpmg@niccomp.com](mailto:tpmg@niccomp.com)

### NPX Polypropylene Film (PP) vs. Polyethylene (PE) & Polycarbonate (PC) Film



NIC Components Corp.

[www.niccomp.com](http://www.niccomp.com) | [www.lowESR.com](http://www.lowESR.com) | [www.SMTmagnetics.com](http://www.SMTmagnetics.com)