

# Interference Suppression Capacitor

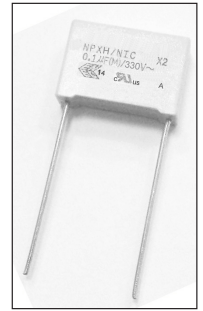
NPXH Series

MOLDED BOX CONSTRUCTION, SUPPRESSION CAPACITOR, RADIAL LEAD

## FEATURES

- Self-Healing Construction
- "X2" Safety Cap Classification For Use In Across-The-Line Applications
- Wide Cap Range: 0.001 $\mu$ F ~ 10 $\mu$ F
- High VAC Rating: 300VAC / 310VAC / 330VAC
- Safety Agency Listings: UL, cUL, ENEC, CQC
- Reduced Size Options
- Tape And Box Packaging Supported

**HIGH VOLTAGE**  
**X2, 300/310/330VAC**



## SPECIFICATIONS (CLASS X2)

Operating Temperature	-40°C ~ +110°C	
Rated Voltage	300/310/330VAC	
Capacitance Range	0.001 $\mu$ F ~ 10 $\mu$ F	
Capacitance Tolerance	$\pm$ 5% (J), $\pm$ 10% (K), $\pm$ 20% (M)	
Insulation Resistance (min.)	$\leq$ 0.33 $\mu$ F IR > 15,000Megohm @ 100V after 60 sec. >0.33 $\mu$ F IR $\geq$ 5,000Megohm @ 100V after 60 sec.	
Dissipation Factor	< 0.1% max. @ 1KHz/20°C	
IEC 60068-1 Climatic category (Damp heat, steady state)	40/110/56 Temp. +40°C $\pm$ 2°C with relative humidity (RH): 93% $\pm$ 2% for 56 days	
Dielectric Strength	Between Terminals	1290VDC for 60 second max.
	Between Terminals & Enclosure	2000VAC rms for 2 seconds max.

## SAFETY AGENCY APPROVALS

Agency	Standard	Capacitance Values	Voltages	Certificate Number
UL/cUL	UL60384-14 CSAE60384-14	0.001 $\mu$ F ~ 10 $\mu$ F	300/310/330VAC	E209251
	ENEC		EN60384-14 : 2005 (ed.3)	300/310/330VAC
CQC	IEC60384-14 : 2005		300/310/330VAC	CQC13001099627

## DV/DT RATINGS

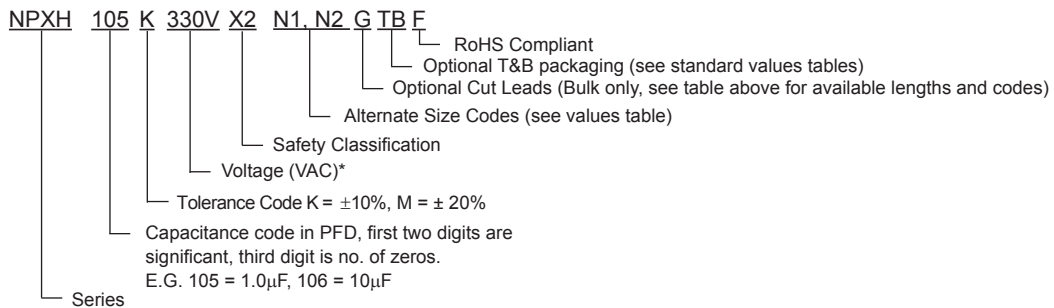
Lead-Space (mm)	7.5	10	15	22.5	27.5	32.5	37.5	47.5
DV/DT (V/ $\mu$ S)	600	500	400	200	150	100	90	80

## CUT LEAD CODES (BULK PARTS ONLY)

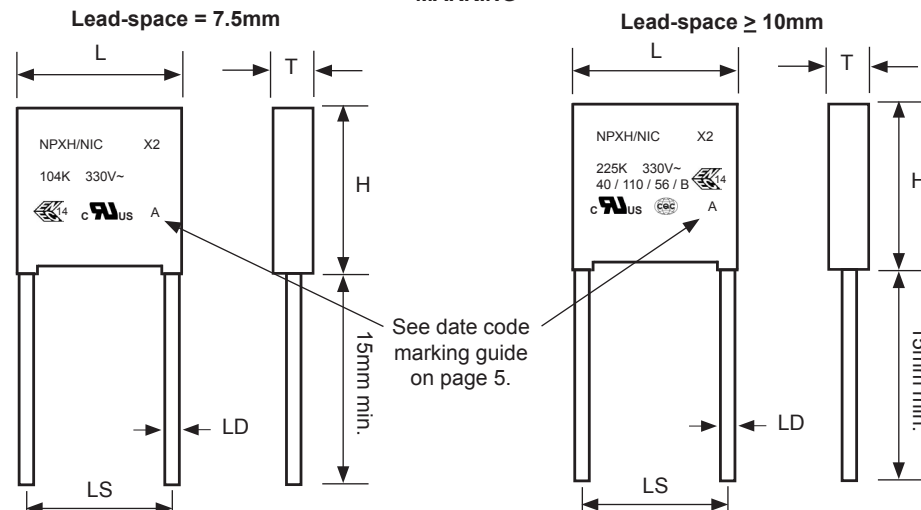
Lead Length*	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
Code	A	B	C	D	E	G	H	J	K	L	M

\* Lead length  $\pm$ 0.5mm

## PART NUMBER SYSTEM



## MARKING



## STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (μF)	Capacitance Code	Capacitance Tolerance	L ±1.0	H ±1.0	T ±1.0	LS ±1.0	LD ±0.05	Packaging Quantity	
									Bulk	T&B
NPXH102K330VX2N1F	0.0010	102	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH102K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH102K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH122K330VX2N1F	0.0012	122	±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH152K330VX2N1F	0.0015	152	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH152K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH152K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH182K330VX2N1F	0.0018	182	±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH222K330VX2N1F	0.0022	222	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH222K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH222K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH272K330VX2N1F	0.0027	272	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH272K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH272K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH332K330VX2N1F	0.0033	332	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH332K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH332K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH392K330VX2N1F	0.0039	392	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH392K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH392K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH472K330VX2N1F	0.0047	472	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH472K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH472K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH562K330VX2N1F	0.0056	562	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH562K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH562K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH682K330VX2N1F	0.0068	682	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH682K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH682K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH822K330VX2N1F	0.0082	822	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH822K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH822K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH103K330VX2N1F	0.010	103	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH103K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	9.0	4.0	10.0	0.6	500	650
NPXH103K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH103K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH103K330VX2N5F	0.010	103	±5% (J), ±10% (K), ±20% (M)	18.0	13.5	6.0	15.0	0.6	500	400
NPXH123K330VX2N1F			±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH123K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH123K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH153K330VX2N1F	0.015	153	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH153K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH153K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	13.0	12.0	6.0	10.0	0.6	500	450
NPXH153K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH183K330VX2N1F	0.018	183	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH183K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH183K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450
NPXH223K330VX2N1F	0.022	223	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH223K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH223K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	17.0	11.0	5.5	15.0	0.8	500	450
NPXH223K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.8	500	450
NPXH273K330VX2N1F	0.027	273	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH273K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH273K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.8	500	450
NPXH333K330VX2N1F	0.033	333	±5% (J), ±10% (K), ±20% (M)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXH333K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500
NPXH333K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.8	500	450
NPXH393K330VX2N1F	0.039	393	±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.8	500	450



## STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (μF)	Capacitance Code	Capacitance Tolerance	L	H	T	LS	LD	Bulk Package Quantity			
				±1.0	±1.0	±1.0	±1.0	±0.05	Bulk	T&B		
NPXH473K330VX2N1F	0.047	473	±5% (J), ±10% (K), ±20% (M)	10.5	11.0	5.0	7.5	0.6	1000	1000		
NPXH473K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500		
NPXH473K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	13.0	12.0	6.0	10.0	0.6	500	450		
NPXH473K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.8	500	450		
NPXH563K330VX2N1F	0.056	563	±5% (J), ±10% (K), ±20% (M)	13.0	12.0	6.0	10.0	0.6	500	450		
NPXH563K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	11.0	5.0	10.0	0.6	500	500		
NPXH563K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.8	500	450		
NPXH683K330VX2N1F	0.068	683	±5% (J), ±10% (K), ±20% (M)	10.5	12.0	6.0	7.5	0.6	500	800		
NPXH683K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	12.0	6.0	10.0	0.6	500	450		
NPXH683K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	17.0	11.0	5.5	15.0	0.8	500	450		
NPXH683K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.8	500	450		
NPXH823K330VX2N1F	0.082	823	±5% (J), ±10% (K), ±20% (M)	13.0	12.0	6.0	10.0	0.6	500	450		
NPXH823K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	17.0	11.0	5.5	15.0	0.8	500	450		
NPXH104K330VX2N1F	0.10	104	±5% (J), ±10% (K), ±20% (M)	11.0	13.5	8.5	7.5	0.6	500	550		
NPXH104K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	12.0	6.0	10.0	0.6	500	450		
NPXH104K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	13.0	14.0	8.0	10.0	0.6	500	300		
NPXH104K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	17.0	11.0	5.5	15.0	0.6	500	450		
NPXH104K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	18.0	11.0	5.0	15.0	0.6	500	450		
NPXH104K330VX2N6F			±5% (J), ±10% (K), ±20% (M)	25.0	14.5	6.0	22.5	0.8	200	N/A		
NPXH124K330VX2N1F	0.12	124	±5% (J), ±10% (K), ±20% (M)	18.0	12.0	6.0	15.0	0.8	500	400		
NPXH124K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	25.0	14.5	6.0	22.5	0.8	200	N/A		
NPXH154K330VX2N1F	0.15	154	±5% (J), ±10% (K), ±20% (M)	10.0	14.0	9.5	7.5	0.6	500	550		
NPXH154K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	13.0	12.0	6.0	10.0	0.6	500	450		
NPXH154K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	13.0	14.0	8.0	10.0	0.6	500	300		
NPXH154K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	18.0	13.5	6.0	15.0	0.8	500	400		
NPXH154K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	18.0	12.0	6.0	15.0	0.8	500	400		
NPXH154K330VX2N6F			±5% (J), ±10% (K), ±20% (M)	25.0	14.5	6.0	22.5	0.8	200	N/A		
NPXH184K330VX2N1F	0.18	184	±5% (J), ±10% (K), ±20% (M)	18.0	13.5	6.0	15.0	0.8	500	400		
NPXH224K330VX2N1F	0.22	224	±5% (J), ±10% (K), ±20% (M)	13.0	14.0	8.0	10.0	0.6	500	300		
NPXH224K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	17.0	15.5	7.5	15.0	0.8	500	300		
NPXH224K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	14.5	8.5	15.0	0.8	500	400		
NPXH224K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	25.0	14.5	6.0	22.5	0.8	200	N/A		
NPXH224K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	25.0	17.5	8.0	22.5	0.8	200	N/A		
NPXH274K330VX2N1F			0.27	274	±5% (J), ±10% (K), ±20% (M)	17.0	16.5	9.5	15.0	0.8	400	250
NPXH274K330VX2N2F	±5% (J), ±10% (K), ±20% (M)	17.0			15.5	7.5	15.0	0.8	500	300		
NPXH274K330VX2N3F	±5% (J), ±10% (K), ±20% (M)	26.5			16.5	7.0	22.5	0.8	200	N/A		
NPXH334K330VX2N1F	0.33	334			±5% (J), ±10% (K), ±20% (M)	13.0	14.0	8.0	10.0	0.6	500	300
NPXH334K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	17.0	15.5	7.5	15.0	0.8	500	300		
NPXH334K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	17.0	16.5	9.5	15.0	0.8	400	250		
NPXH334K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	26.5	16.5	7.0	22.5	0.8	200	N/A		
NPXH334K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	31.5	16.5	7.5	27.5	0.8	100	N/A		
NPXH394K330VX2N1F			0.39	394	±5% (J), ±10% (K), ±20% (M)	17.0	19.0	11.0	15.0	0.8	200	200
NPXH394K330VX2N2F	±5% (J), ±10% (K), ±20% (M)	26.5			17.0	8.5	22.5	0.8	200	N/A		
NPXH474K330VX2N1F	0.47	474	±5% (J), ±10% (K), ±20% (M)	17.0	16.5	9.5	15.0	0.8	400	250		
NPXH474K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	17.0	19.0	11.0	15.0	0.8	200	200		
NPXH474K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	18.0	18.5	11.1	15.0	0.8	200	200		
NPXH474K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	18.0	16.5	8.5	15.0	0.8	200	250		
NPXH474K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	26.5	17.0	8.5	22.5	0.8	200	N/A		
NPXH474K330VX2N6F			±5% (J), ±10% (K), ±20% (M)	26.5	16.5	7.0	22.5	0.8	200	N/A		
NPXH474K330VX2N7F			±5% (J), ±10% (K), ±20% (M)	31.5	16.5	7.5	27.5	0.8	100	N/A		
NPXH474K330VX2N8F			±5% (J), ±10% (K), ±20% (M)	31.5	20.0	11.0	27.5	0.8	100	N/A		
NPXH524K330VX2N1F			0.52	524	±5% (J), ±10% (K), ±20% (M)	25.0	19.0	8.5	22.5	0.8	200	N/A
NPXH564K330VX2N1F			0.56	564	±5% (J), ±10% (K), ±20% (M)	17.0	19.0	11.0	15.0	0.8	200	200
NPXH564K330VX2N2F	±5% (J), ±10% (K), ±20% (M)	18.0			18.5	11.1	15.0	0.8	200	200		
NPXH564K330VX2N3F	±5% (J), ±10% (K), ±20% (M)	26.5			17.0	8.5	22.5	0.8	200	N/A		
NPXH564K330VX2N4F	±5% (J), ±10% (K), ±20% (M)	26.5			19.0	10.0	22.5	0.8	200	N/A		
NPXH564K330VX2N5F	±5% (J), ±10% (K), ±20% (M)	31.5			20.0	11.0	27.5	0.8	100	N/A		
NPXH604K330VX2N1F	0.60	604			±5% (J), ±10% (K), ±20% (M)	31.5	20.0	11.0	27.5	0.8	100	N/A

## STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (μF)	Capacitance Code	Capacitance Tolerance	L ±1.0	H ±1.0	T ±1.0	LS ±1.0	LD ±0.05	Bulk Package Quantity	
									Bulk	T&B
NPXH684K330VX2N1F	0.68	684	±5% (J), ±10% (K), ±20% (M)	17.0	19.0	11.0	15.0	0.8	200	200
NPXH684K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	18.0	18.5	11.1	15.0	0.8	200	200
NPXH684K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	25.0	17.0	8.5	22.5	0.8	200	N/A
NPXH684K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	26.5	19.0	10.0	22.5	0.8	200	N/A
NPXH684K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	31.5	20.0	11.0	27.5	0.8	100	N/A
NPXH824K330VX2N1F	0.82	824	±5% (J), ±10% (K), ±20% (M)	18.0	18.0	10.0	15.0	0.8	200	250
NPXH824K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	26.5	19.0	10.0	22.5	0.8	200	N/A
NPXH824K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	31.5	20.0	11.0	27.5	0.8	100	N/A
NPXH105K330VX2N1F	1.0	105	±5% (J), ±10% (K), ±20% (M)	18.0	18.5	11.1	15.0	0.8	200	N/A
NPXH105K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	26.0	21.5	12.0	22.5	0.8	100	N/A
NPXH105K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	26.5	19.0	10.0	22.5	0.8	200	N/A
NPXH105K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	30.0	21.0	12.0	27.5	0.8	100	N/A
NPXH105K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	31.5	22.5	13.0	27.5	0.8	100	N/A
NPXH105K330VX2N6F			±5% (J), ±10% (K), ±20% (M)	37.0	24.0	13.5	32.5	0.8	50	N/A
NPXH125K330VX2N1F	1.2	125	±5% (J), ±10% (K), ±20% (M)	31.5	22.5	13.0	27.5	0.8	100	N/A
NPXH125K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	37.0	24.0	13.5	32.5	0.8	50	N/A
NPXH155K330VX2N1F	1.5	155	±5% (J), ±10% (K), ±20% (M)	25.0	23.5	14.0	22.5	0.8	100	N/A
NPXH155K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	31.5	22.5	13.0	27.5	0.8	100	N/A
NPXH155K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	31.5	25.0	14.0	27.5	0.8	100	N/A
NPXH155K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	36.0	24.0	13.5	32.5	0.8	50	N/A
NPXH185K330VX2N1F	1.8	185	±5% (J), ±10% (K), ±20% (M)	31.5	22.5	13.5	27.5	0.8	100	N/A
NPXH185K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	37.0	26.5	16.0	32.5	0.8	50	N/A
NPXH185K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	41.0	26.0	12.0	37.5	1.0	50	N/A
NPXH205K330VX2N1F	2.0	205	±5% (J), ±10% (K), ±20% (M)	26.0	25.0	15.0	22.5	0.8	50	N/A
NPXH205K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	32.0	28.0	18.0	27.5	0.8	100	N/A
NPXH205K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	31.5	25.0	14.0	27.5	0.8	100	N/A
NPXH205K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	41.0	26.0	12.0	37.5	1.0	300	N/A
NPXH205K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	41.0	28.0	14.0	37.5	1.0	250	N/A
NPXH225K330VX2N1F			2.2	225	±5% (J), ±10% (K), ±20% (M)	26.0	25.0	15.0	22.5	0.8
NPXH225K330VX2N2F	±5% (J), ±10% (K), ±20% (M)	31.5			25.0	14.0	27.5	0.8	100	N/A
NPXH225K330VX2N3F	±5% (J), ±10% (K), ±20% (M)	32.0			28.0	18.0	27.5	0.8	50	N/A
NPXH225K330VX2N4F	±5% (J), ±10% (K), ±20% (M)	37.0			26.5	16.0	32.5	0.8	50	N/A
NPXH225K330VX2N5F	±5% (J), ±10% (K), ±20% (M)	41.0			26.0	12.0	37.5	1.0	300	N/A
NPXH225K330VX2N6F	±5% (J), ±10% (K), ±20% (M)	41.0			28.0	14.0	37.5	1.0	250	N/A
NPXH275K330VX2N1F	2.7	275	±5% (J), ±10% (K), ±20% (M)	31.0	31.0	22.0	27.5	0.8	200	N/A
NPXH275K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	37.0	28.5	18.0	32.5	0.8	200	N/A
NPXH275K330VX2N5F			±5% (J), ±10% (K), ±20% (M)	41.0	28.0	14.0	37.5	1.0	250	N/A
NPXH335K330VX2N1F	3.3	335	±5% (J), ±10% (K), ±20% (M)	32.0	28.0	18.0	27.5	0.8	50	N/A
NPXH335K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	35.5	31.0	20.0	32.5	1.0	200	N/A
NPXH335K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	41.0	30.0	16.0	37.5	1.0	200	N/A
NPXH335K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	51.0	27.5	17.5	47.5	1.0	170	N/A
NPXH395K330VX2N1F	3.9	395	±5% (J), ±10% (K), ±20% (M)	41.0	32.0	17.0	37.5	1.0	200	N/A
NPXH395K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	51.0	27.5	17.5	47.5	1.0	170	N/A
NPXH475K330VX2N1F	4.7	475	±5% (J), ±10% (K), ±20% (M)	31.0	31.0	22.0	27.5	0.8	200	N/A
NPXH475K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	37.0	34.0	22.0	32.5	0.8	180	N/A
NPXH475K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	41.0	33.5	19.5	37.5	1.0	196	N/A
NPXH475K330VX2N4F			±5% (J), ±10% (K), ±20% (M)	51.0	30.5	20.0	47.5	1.0	200	N/A
NPXH565K330VX2N1F	5.6	565	±5% (J), ±10% (K), ±20% (M)	31.0	31.0	22.0	27.5	0.8	200	N/A
NPXH565K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	41.0	37.0	22.0	37.5	1.0	150	N/A
NPXH565K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	51.0	34.0	22.0	47.5	1.0	132	N/A
NPXH685K330VX2N1F	6.8	685	±5% (J), ±10% (K), ±20% (M)	41.0	37.0	22.0	37.5	1.0	150	N/A
NPXH685K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	51.0	34.0	22.0	47.5	1.0	132	N/A
NPXH825K330VX2N1F	8.2	825	±5% (J), ±10% (K), ±20% (M)	41.5	41.0	27.5	37.5	1.0	140	N/A
NPXH825K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	51.0	43.5	29.0	47.5	1.0	100	N/A
NPXH106K330VX2N1F	10.0	106	±5% (J), ±10% (K), ±20% (M)	41.0	43.0	28.0	37.5	1.0	120	N/A
NPXH106K330VX2N2F			±5% (J), ±10% (K), ±20% (M)	51.0	43.5	29.0	47.5	1.0	100	N/A
NPXH106K330VX2N3F			±5% (J), ±10% (K), ±20% (M)	51.0	49.5	35.0	47.5	1.0	80	N/A

## ENVIRONMENTAL CHARACTERISTICS

Item	Test Method	Standard
Endurance	+110°C±2°C, 125% of RV for 1,000 hours (Voltage applied through 47Ω ± 5% resistor, every hour voltaged increased to 1,000Vrms for 0.1 seconds).	Physical: No remarkable physical Capacitance: Within ±10% of initial measured value DF: ≤ 0.5%, IR ≥ 50% of specified value
Moisture Resistance	+40°C±2°C, Rated Voltage, 87% ~ 93% RH, 500 hours. (Part stabilized at room temperature for 1.5 ± 0.5 hours before taking measurements)	Physical: No remarkable physical Capacitance: Within ±5% of initial measured value DF: ≤ 0.2%, IR ≥ 50% of specified value
Temperature Cycling	A total of 5 cycles. Each cycle includes: 1. +20 ± 2°C for 3 minutes 2. -40 ± 3°C for 30 minutes 3. +20 ± 2°C for 3 minutes 4. +110 ± 2°C for 30 minutes 5. +20 ± 2°C for 3 minutes After test allow parts to stabilized at room temperature for 1.5 ± 0.5 hours before taking measurements.	Physical: No remarkable physical Capacitance: Within ±5% of initial measured value DF: ≤ 0.2%, IR ≥ 50% of specified value
Resistance to Dry Heat	+110 ± 2°C for 16 +1/-0 hours	Physical: No remarkable physical Capacitance: Within ±5% of initial measured value DF: ≤ 0.2%, IR ≥ 50% of specified value
Resistance to Cold	-40°C for 2 hours	Physical: No remarkable physical Capacitance: Within ±5% of initial measured value DF: ≤ 0.2%, IR ≥ 50% of specified value
Resistance to Soldering Heat	Preheat: +100°C ~ +120°C (60 seconds max). Ramp-up rate: 3°C per second max. Peak soldering temperature: +260 ± 5°C for 5 seconds max. Immersion depth: 4.8mm max from base of component (Part stabilized at room temperature for 1.5 ± 0.5 hours before taking measurements)	Physical: No remarkable physical Capacitance: Within ±5% of initial measured value DF: ≤ 0.2%, IR ≥ 50% of specified value
Vibration	Frequency: 10-55-10Hz Magnitude: 1.5mm in X, Y and Z directions Duration: 2 +1/-0 hours in each direction	No short/open circuit and stable connection
Terminal Strength	Apply 1.0Kg of force for 10 ± 1 seconds to the terminal in the axial direction away from the body of the part.	No abnormalities

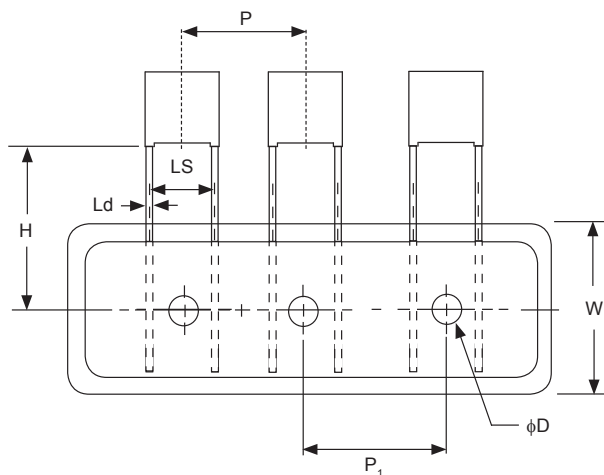
## DATE CODE MARKING

Year	Month	Code	Year	Month	Code	Year	Month	Code	Year	Month	Code
2016	Jan.	n	2017	Jan.	A	2018	Jan.	N	2019	Jan.	a
	Feb.	p		Feb.	B		Feb.	P		Feb.	b
	Mar.	q		Mar.	C		Mar.	Q		Mar.	c
	Apr.	r		Apr.	D		Apr.	R		Apr.	d
	May	s		May	E		May	S		May	e
	Jun.	t		Jun.	F		Jun.	T		Jun.	f
	Jul.	u		Jul.	G		Jul.	U		Jul.	g
	Aug.	v		Aug.	H		Aug.	V		Aug.	h
	Sept.	w		Sept.	J		Sept.	W		Sept.	j
	Oct.	x		Oct.	K		Oct.	X		Oct.	k
	Nov.	y		Nov.	L		Nov.	Y		Nov.	l
	Dec.	z		Dec.	M		Dec.	Z		Dec.	m



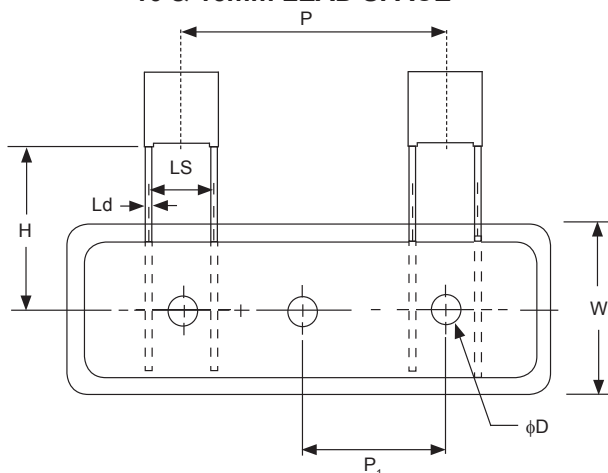
## AMMO PACK (TB) TAPING DIMENSIONS 7.5mm LEAD SPACE

Item	Dimension (mm)
H	18.5 ± 1.0
Ld	0.60 ± 0.1
LS	7.5 ± 1.0
P	12.7 ± 1.5
P <sub>1</sub>	12.7 ± 0.3
W	18.0 ± 1.0
φD <sub>1</sub>	4.0 ± 0.3



## AMMO PACK (TB) TAPING DIMENSIONS 10 & 15mm LEAD SPACE

Item	Dimension (mm)	
H	18.5 ± 1.0	
Ld	0.60 ± 0.1	0.60/0.80 ± 0.1
LS	10.0 ± 1.0	15.0 ± 1.0
P	25.4 ± 1.5	
P <sub>1</sub>	12.7 ± 0.3	
W	18.0 ± 1.0	
φD <sub>1</sub>	4.0 ± 0.3	



## AMMO PACK BOX DIMENSIONS

Item	Dimension (mm)
A	270
B	50
C	330

