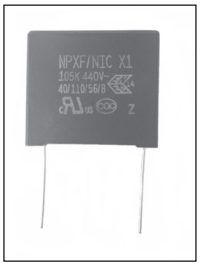
Interference Suppression Capacitor

NPXF Series

MOLDED BOX CONSTRUCTION, SUPPRESSION CAPACITOR, RADIAL LEAD



FEATURES

- Safety Agency Listed: UL, cUL, ENEC, CQC
- "X1" 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

HIGH VOLTAGE X1 440VAC

SPECIFICATIONS (CLASS X1)

Operating Temperature		-40°C ~ +110°C
Rated Voltage		440VAC
Capacitance Range		0.001µF ~ 10µF
Capacitance Tolerance		±5% (J), ±10% (K), ±20% (M)
Insulation Resistance (min.)		≤0.33µF IR > 15,000Megohm @ 100V after 60 sec. >0.33µF IR ≥ 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 ± 2°C with relative humidity (RH): 93% ±2% for 56 days
Dielectric Strength	Between Terminals	3400VDC for 2 seconds max.
	Between Terminals & Enclosure	2560VAC for 1 minute max.

SAFETY AGENCY APPROVALS

Agency	Standard	Capacitance Values	Voltages	Certificate Number
UL/cUL	UL60384-14 CSAE60384-14	0.001µF ~ 10µF	440VAC	E209251
ENEC	EN60384-14 : 2005 (ed.3)		440VAC	SE/12059-1A
CQC	IEC60384-14 : 2005		440VAC	CQC13001099627

DV/DT RATINGS

Lead-Space (mm)	7.5	10	15	22.5	27.5	32.5	37.5	47.5	52.5
DV/DT (V/µS)	550	450	250	180	150	100	90	80	50

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 ±0.5mm

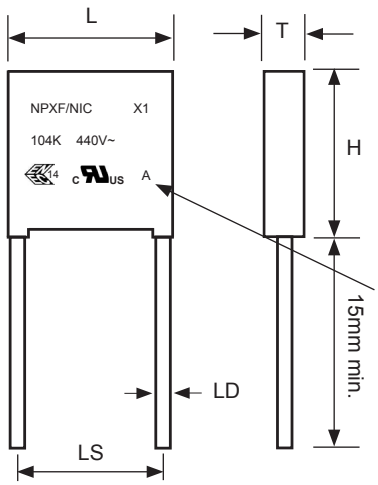
PART NUMBER SYSTEM

NPXF 105 K 440V X1 N1, N2 G TB F

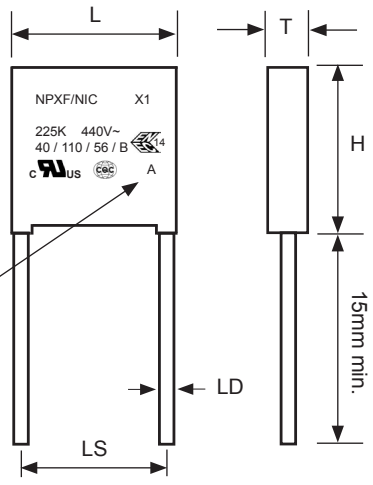
- F — RoHS Compliant
- TB — Optional T&B packaging (see standard values tables)
- G — Optional Cut Leads (Bulk only, see table above for available lengths and codes)
- N1, N2 — Alternate Size Codes (see values table)
- X1 — Safety Classification
- 440V — Voltage (VAC)*
- K — Tolerance Code K = ±10%, M = ± 20%
- 105 — Capacitance code in PFD, first two digits are significant, third digit is no. of zeros. E.G. 105 = 1.0µF, 106 = 10µF
- NPXF — Series

MARKING

Lead-space = 7.5mm



Lead-space ≥ 10mm



See date code marking guide on page 5.

STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (µF)	Capacitance Code	Standard Tolerance*	L ±1.0	H ±1.0	T ±1.0	LS ±1.0	LD ±0.05	Packaging Quantity	
									Bulk	T&B
NPXF102K440VX1N1F	0.001	102	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF102K440VX1N2F	0.001	102	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF102K440VX1N3F	0.001	102	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF152K440VX1N1F	0.0015	152	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF152K440VX1N2F	0.0015	152	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF152K440VX1N3F	0.0015	152	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF222K440VX1N1F	0.0022	222	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF222K440VX1N2F	0.0022	222	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF222K440VX1N3F	0.0022	222	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF272K440VX1N1F	0.0027	272	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF272K440VX1N2F	0.0027	272	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF272K440VX1N3F	0.0027	272	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF332K440VX1N1F	0.0033	332	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF332K440VX1N2F	0.0033	332	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF332K440VX1N3F	0.0033	332	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF392K440VX1N1F	0.0039	392	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF392K440VX1N2F	0.0039	392	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF392K440VX1N3F	0.0039	392	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF472K440VX1N1F	0.0047	472	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF472K440VX1N2F	0.0047	472	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF472K440VX1N3F	0.0047	472	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF562K440VX1N1F	0.0056	562	±10% (K)	10.5	9.0	4.0	7.5	0.6	1000	1300
NPXF562K440VX1N2F	0.0056	562	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF562K440VX1N3F	0.0056	562	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF682K440VX1N1F	0.0068	682	±10% (K)	10.5	11.0	5.0	7.5	0.6	1000	1000
NPXF682K440VX1N2F	0.0068	682	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF682K440VX1N3F	0.0068	682	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF822K440VX1N1F	0.0082	822	±10% (K)	10.5	11.0	5.0	7.5	0.6	1000	1000
NPXF822K440VX1N2F	0.0082	822	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF822K440VX1N3F	0.0082	822	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF103K440VX1N1F	0.01	103	±10% (K)	10.5	11.0	5.0	7.5	0.6	1000	1000
NPXF103K440VX1N2F	0.01	103	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF103K440VX1N3F	0.01	103	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF123K440VX1N1F	0.012	123	±10% (K)	10.5	12.0	6.0	7.5	0.6	1000	800
NPXF123K440VX1N2F	0.012	123	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF123K440VX1N3F	0.012	123	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF153M440VX1N1F	0.015	153	±20% (M)	10.5	12.0	6.0	7.5	0.6	1000	800
NPXF153K440VX1N2F	0.015	153	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF153K440VX1N3F	0.015	153	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF183K440VX1N1F	0.018	183	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF183K440VX1N2F	0.018	183	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF223K440VX1N1F	0.022	223	±10% (K)	13.0	11.0	5.0	10.0	0.6	500	500
NPXF223K440VX1N2F	0.022	223	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF273K440VX1N1F	0.027	273	±10% (K)	13.0	12.0	6.0	10.0	0.6	500	450
NPXF273K440VX1N2F	0.027	273	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF333K440VX1N1F	0.033	333	±10% (K)	13.0	12.0	6.0	10.0	0.6	500	450
NPXF333K440VX1N2F	0.033	333	±10% (K)	18.0	11.0	5.0	15.0	0.6	500	450
NPXF393K440VX1N1F	0.039	393	±10% (K)	13.0	13.0	7.0	10.0	0.6	500	300
NPXF393K440VX1N2F	0.039	393	±10% (K)	18.0	12.0	6.0	15.0	0.8	500	400
NPXF393K440VX1N3F	0.039	393	±10% (K)	25.0	14.5	6.0	22.5	0.8	200	NA
NPXF473M440VX1N1F	0.047	473	±20% (M)	13.0	13.0	7.0	10.0	0.6	500	300
NPXF473K440VX1N2F	0.047	473	±10% (K)	18.0	12.0	6.0	15.0	0.8	500	400
NPXF473K440VX1N3F	0.047	473	±10% (K)	25.0	14.5	6.0	22.5	0.8	200	NA
NPXF563K440VX1N1F	0.056	563	±10% (K)	13.0	14.0	8.0	10.0	0.6	500	300
NPXF563M440VX1N2F	0.056	563	±20% (M)	18.0	12.0	6.0	15.0	0.8	500	400
NPXF563K440VX1N3F	0.056	563	±10% (K)	18.0	13.5	6.0	15.0	0.8	500	400
NPXF563K440VX1N4F	0.056	563	±10% (K)	25.0	14.5	6.0	22.5	0.8	200	NA
NPXF683K440VX1N1F	0.068	683	±10% (K)	17.0	15.5	7.5	15.0	0.8	500	300
NPXF683K440VX1N2F	0.068	683	±10% (K)	25.0	14.5	6.0	22.5	0.8	200	NA

***10% tolerance items are also available in ±5% (J) and ±20% (M)**

STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (μF)	Capacitance Code	Standard Tolerance*	L ±1.0	H ±1.0	T ±1.0	LS ±1.0	LD ±0.05	Packaging Quantity	
									Bulk	T&B
NPXF823K440VX1N1F	0.082	823	±10% (K)	17.0	15.5	7.5	15.0	0.8	500	300
NPXF823K440VX1N2F	0.082	823	±10% (K)	25.0	14.5	6.0	22.5	0.8	200	NA
NPXF104M440VX1N1F	0.10	104	±20% (M)	17.0	15.5	7.5	15.0	0.8	500	300
NPXF104K440VX1N2F	0.10	104	±10% (K)	18.0	14.5	8.5	15.0	0.8	500	300
NPXF104K440VX1N3F	0.10	104	±10% (K)	25.0	14.5	6.0	22.5	0.8	200	NA
NPXF124K440VX1N1F	0.12	124	±10% (K)	17.0	16.5	9.5	15.0	0.8	400	250
NPXF124K440VX1N2F	0.12	124	±10% (K)	25.0	14.5	6.0	22.5	0.8	200	NA
NPXF154M440VX1N1F	0.15	154	±20% (M)	17.0	16.5	9.5	15.0	0.8	400	250
NPXF154K440VX1N2F	0.15	154	±10% (K)	17.0	19.0	11.0	15.0	0.8	200	200
NPXF154K440VX1N3F	0.15	154	±10% (K)	26.5	16.5	7.0	22.5	0.8	200	NA
NPXF154K440VX1N4F	0.15	154	±10% (K)	31.5	16.5	7.5	27.5	0.8	100	NA
NPXF184K440VX1N1F	0.18	184	±10% (K)	17.0	19.0	11.0	15.0	0.8	200	200
NPXF184K440VX1N2F	0.18	184	±10% (K)	26.5	17.5	8.5	22.5	0.8	200	NA
NPXF184K440VX1N3F	0.18	184	±10% (K)	31.5	16.5	7.5	27.5	0.8	100	NA
NPXF224K440VX1N1F	0.22	224	±10% (K)	26.5	17.5	8.5	22.5	0.8	200	NA
NPXF224K440VX1N2F	0.22	224	±10% (K)	32.0	18.0	9.0	27.5	0.8	100	NA
NPXF274K440VX1N1F	0.27	274	±10% (K)	26.5	19.0	10.0	22.5	0.8	200	NA
NPXF274K440VX1N2F	0.27	274	±10% (K)	32.0	18.0	9.0	27.5	0.8	100	NA
NPXF334K440VX1N1F	0.33	334	±10% (K)	26.0	20.0	11.0	22.5	0.8	300	NA
NPXF334K440VX1N2F	0.33	334	±10% (K)	31.5	20.0	11.0	27.5	0.8	200	NA
NPXF334K440VX1N3F	0.33	334	±10% (K)	32.0	12.0	18.0	27.5	0.8	100	NA
NPXF334K440VX1N4F	0.33	334	±10% (K)	37.0	24.0	13.5	32.5	0.8	100	NA
NPXF334K440VX1N5F	0.33	334	±10% (K)	41.0	22.0	11.0	37.5	1.0	50	NA
NPXF394K440VX1N1F	0.39	394	±10% (K)	26.0	20.0	11.0	22.5	0.8	100	NA
NPXF394K440VX1N2F	0.39	394	±10% (K)	31.5	20.0	11.0	27.5	0.8	100	NA
NPXF394K440VX1N3F	0.39	394	±10% (K)	37.0	24.0	13.5	32.5	0.8	50	NA
NPXF394K440VX1N4F	0.39	394	±10% (K)	41.0	22.0	11.0	37.5	1.0	300	NA
NPXF474K440VX1N1F	0.47	474	±10% (K)	25.0	23.5	14.0	22.5	0.8	100	NA
NPXF474M440VX1N2F	0.47	474	±20% (M)	26.0	21.5	12.0	22.5	0.8	100	NA
NPXF474M440VX1N3F	0.47	474	±20% (M)	31.5	20.0	11.0	27.5	0.8	100	NA
NPXF474K440VX1N4F	0.47	474	±10% (K)	32.0	12.0	22.0	27.5	0.8	100	NA
NPXF474K440VX1N5F	0.47	474	±10% (K)	37.0	24.0	13.5	32.5	0.8	50	NA
NPXF474K440VX1N6F	0.47	474	±10% (K)	41.0	22.0	11.0	37.5	1.0	300	NA
NPXF524K440VX1N1F	0.52	524	±10% (K)	25.0	23.5	14.0	22.5	0.8	100	NA
NPXF564M440VX1N1F	0.56	564	±20% (M)	25.0	23.5	14.0	22.5	0.8	100	NA
NPXF564K440VX1N2F	0.56	564	±10% (K)	26.0	25.0	15.0	22.5	0.8	100	NA
NPXF564K440VX1N3F	0.56	564	±10% (K)	31.5	22.5	13.0	27.5	0.8	100	NA
NPXF564K440VX1N4F	0.56	564	±10% (K)	37.0	24.0	13.5	32.5	0.8	50	NA
NPXF564K440VX1N5F	0.56	564	±10% (K)	41.0	22.0	11.0	37.5	1.0	300	NA
NPXF604K440VX1N1F	0.60	604	±10% (K)	31.5	25.0	14.0	27.5	0.8	100	NA
NPXF684M440VX1N1F	0.68	684	±20% (M)	26.0	25.0	15.0	22.5	0.8	100	NA
NPXF684M440VX1N2F	0.68	684	±20% (M)	31.5	22.5	13.0	27.5	0.8	100	NA
NPXF684K440VX1N3F	0.68	684	±10% (K)	31.5	25.0	14.0	27.5	0.8	100	NA
NPXF684K440VX1N4F	0.68	684	±10% (K)	32.0	16.0	22.0	27.5	0.8	100	NA
NPXF684K440VX1N5F	0.68	684	±10% (K)	37.0	24.0	13.5	32.5	0.8	50	NA
NPXF684K440VX1N6F	0.68	684	±10% (K)	41.0	22.0	11.0	37.5	1.0	300	NA
NPXF804K440VX1N1F	0.80	804	±10% (K)	37.0	26.5	16.0	32.5	0.8	50	NA
NPXF824M440VX1N1F	0.82	824	±20% (M)	31.5	25.0	14.0	27.5	0.8	100	NA
NPXF824K440VX1N2F	0.82	824	±10% (K)	32.0	28.0	14.0	27.5	0.8	50	NA
NPXF824M440VX1N3F	0.82	824	±20% (M)	37.0	24.0	13.5	32.5	0.8	50	NA
NPXF824M440VX1N4F	0.82	824	±20% (M)	41.0	22.0	11.0	37.5	1.0	300	NA
NPXF824K440VX1N5F	0.82	824	±10% (K)	41.0	26.0	12.0	37.5	1.0	300	NA
NPXF105M440VX1N1F	1.0	105	±20% (M)	32.0	16.0	27.5	27.5	0.8	50	NA
NPXF105K440VX1N2F	1.0	105	±10% (K)	32.0	18.5	31.0	27.5	0.8	50	NA
NPXF105K440VX1N3F	1.0	105	±10% (K)	32.0	28.0	18.0	27.5	0.8	50	NA
NPXF105M440VX1N4F	1.0	105	±20% (M)	37.0	26.5	16.0	32.5	0.8	50	NA
NPXF105K440VX1N5F	1.0	105	±10% (K)	37.0	28.5	18.0	32.5	0.8	200	NA
NPXF105K440VX1N6F	1.0	105	±10% (K)	41.0	26.0	12.0	37.5	1.0	300	NA
NPXF105K440VX1N7F	1.0	105	±10% (K)	42.0	15.0	24.0	37.5	1.0	250	NA

***10% tolerance items are also available in ±5% (J) and ±20% (M)**

STANDARD VALUES AND CASE SIZE (mm)

Part Number	Cap. Value (µF)	Capacitance Code	Standard Tolerance	L ±1.0	H ±1.0	T ±1.0	LS ±1.0	LD ±0.05	Packaging Quantity	
									Bulk	T&B
NPXF125M440VX1N1F	1.2	125	±20% (M)	32.0	28.0	18.0	27.5	0.8	50	NA
NPXF125K440VX1N2F	1.2	125	±10% (K)	32.0	29.0	19.0	27.5	0.8	200	NA
NPXF125K440VX1N3F	1.2	125	±10% (K)	35.5	31.0	20.0	32.5	0.8	200	NA
NPXF125M440VX1N4F	1.2	125	±20% (M)	37.0	28.5	18.0	32.5	0.8	200	NA
NPXF125K440VX1N5F	1.2	125	±10% (K)	41.0	26.0	15.0	37.5	1.0	250	NA
NPXF125K440VX1N6F	1.2	125	±10% (K)	41.0	28.0	14.0	37.5	1.0	200	NA
NPXF155K440VX1N1F	1.5	155	±10% (K)	31.0	31.0	22.0	27.5	0.8	200	NA
NPXF155M440VX1N2F	1.5	155	±20% (M)	32.0	18.5	31.0	27.5	0.8	50	NA
NPXF155M440VX1N3F	1.5	155	±20% (M)	32.0	29.0	19.0	27.5	0.8	200	NA
NPXF155M440VX1N4F	1.5	155	±20% (M)	35.5	31.0	20.0	32.5	0.8	200	NA
NPXF155K440VX1N5F	1.5	155	±10% (K)	37.0	34.0	22.0	32.5	0.8	180	NA
NPXF155M440VX1N6F	1.5	155	±20% (M)	41.0	26.0	15.0	37.5	1.0	200	NA
NPXF155M440VX1N7F	1.5	155	±20% (M)	41.0	28.0	14.0	37.5	1.0	200	NA
NPXF155K440VX1N8F	1.5	155	±10% (K)	41.0	30.0	16.0	37.5	1.0	200	NA
NPXF155K440VX1N9F	1.5	155	±10% (K)	42.0	19.0	24.0	37.5	1.0	200	NA
NPXF185K440VX1N1F	1.8	185	±10% (K)	32.0	37.0	22.0	27.5	0.8	180	NA
NPXF185K440VX1N2F	1.8	185	±10% (K)	37.0	34.0	22.0	32.5	0.8	180	NA
NPXF185M440VX1N3F	1.8	185	±20% (M)	41.0	30.0	16.0	37.5	1.0	200	NA
NPXF185K440VX1N4F	1.8	185	±10% (K)	41.0	32.0	17.0	37.5	1.0	200	NA
NPXF225M440VX1N1F	2.2	225	±20% (M)	32.0	37.0	22.0	27.5	0.8	180	NA
NPXF225M440VX1N2F	2.2	225	±20% (M)	37.0	34.0	22.0	32.5	0.8	180	NA
NPXF225M440VX1N3F	2.2	225	±20% (M)	41.0	32.0	17.0	37.5	1.0	200	NA
NPXF225K440VX1N4F	2.2	225	±10% (K)	41.0	33.5	19.5	37.5	1.0	196	NA
NPXF275K440VX1N1F	2.7	275	±10% (K)	41.0	37.0	22.0	37.5	1.0	150	NA
NPXF335M440VX1N1F	3.3	335	±20% (M)	41.0	37.0	22.0	37.5	1.0	150	NA
NPXF335K440VX1N2F	3.3	335	±10% (K)	41.5	41.0	27.5	37.5	1.0	140	NA
NPXF395K440VX1N1F	3.9	395	±10% (K)	41.0	43.0	28.0	37.5	1.0	120	NA
NPXF445K440VX1N1F	4.4	445	±10% (K)	41.0	43.0	28.0	37.5	1.0	120	NA
NPXF445K440VX1N2F	4.4	445	±10% (K)	51.0	43.5	29.0	47.5	1.0	100	NA
NPXF445K440VX1N3F	4.4	445	±10% (K)	57.0	38.0	24.0	52.5	1.0	96	NA
NPXF475M440VX1N1F	4.7	475	±20% (M)	41.0	43.0	28.0	37.5	1.0	120	NA
NPXF475K440VX1N2F	4.7	475	±10% (K)	42.0	45.0	30.0	37.5	1.0	80	NA
NPXF475K440VX1N3F	4.7	475	±10% (K)	51.0	43.5	29.0	47.5	1.0	100	NA
NPXF475K440VX1N4F	4.7	475	±10% (K)	57.0	38.0	24.0	52.5	1.0	96	NA
NPXF565M440VX1N1F	5.6	565	±20% (M)	51.0	43.5	29.0	47.5	1.0	100	NA
NPXF565M440VX1N2F	5.6	565	±20% (M)	57.0	38.0	24.0	52.5	1.0	96	NA
NPXF565K440VX1N3F	5.6	565	±10% (K)	57.0	45.0	30.0	52.5	1.0	50	NA
NPXF685K440VX1N1F	6.8	685	±10% (K)	51.0	49.5	35.0	47.5	1.0	80	NA
NPXF685M440VX1N2F	6.8	685	±20% (M)	57.0	30.0	44.0	52.5	1.0	48	NA
NPXF685M440VX1N3F	6.8	685	±20% (M)	57.0	45.0	30.0	52.5	1.0	50	NA
NPXF685K440VX1N4F	6.8	685	±10% (K)	57.0	50.0	35.0	52.5	1.0	50	NA
NPXF825M440VX1N1F	8.2	825	±20% (M)	51.0	49.5	35.0	47.5	1.0	80	NA
NPXF825K440VX1N2F	8.2	825	±10% (K)	57.0	50.0	35.0	52.5	1.0	48	NA
NPXF106M440VX1N1F	10	106	±20% (M)	57.0	50.0	35.0	52.5	1.0	48	NA
NPXF106K440VX1N2F	10	106	±10% (K)	57.0	55.0	45.0	52.5	1.0	24	NA

***10% tolerance items are also available in ±5% (J) and ±20% (M)**

ENVIRONMENTAL CHARACTERISTICS

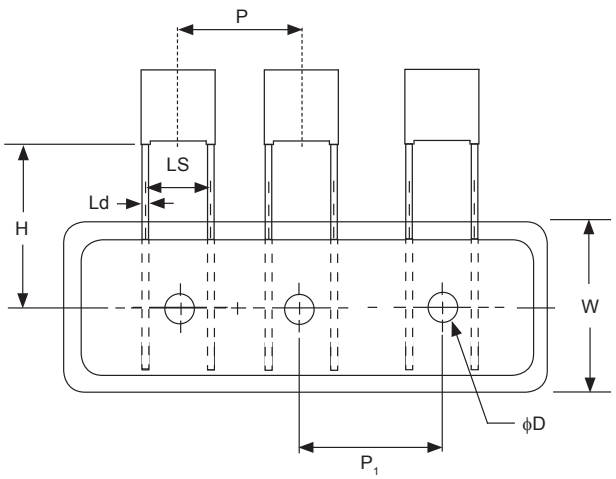
Item	Test Method	Standard
Endurance	+110°C±2°C, 125% of RV for 1,000 hours (Voltage applied through 47Ω ± 5% resistor, every hour voltaged increased to 1,000Vrms for 0.1 seconds).	Physical: No remarkable physical Capacitance: Within ±10% of initial measured value DF: C≤1.0μF 0.8% max., C>1.0μF 0.5% max. IR ≥ 50% of specified value
Moisture Resistance	+40°C±2°C, Rated Voltage, 87% ~ 93% RH, 500 hours. (Part stablized 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 stablized 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 stablized at room temperature for 1.5 ± 0.5 hours before taking measurements)	Physical: No remarkable physical Capacitance: Within ±3% 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

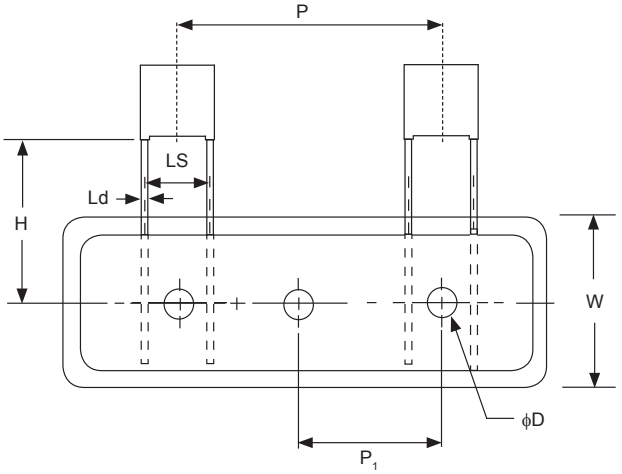
Item	Dimension (mm)
H	18.5 ± 1.0
Ld	0.60 ± 0.1
LS	7.5 ± 1.0
P	12.7 ± 1.5
P_1	12.7 ± 0.3
W	18.0 ± 1.0
ϕD_1	4.0 ± 0.3

AMMO PACK (TB) TAPING DIMENSIONS
7.5mm 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_1	12.7 ± 0.3	
W	18.0 ± 1.0	
ϕD_1	4.0 ± 0.3	

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



Item	Dimension (mm)
A	270
B	50
C	330

AMMO PACK BOX DIMENSIONS