

NPDC Series

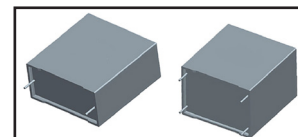
Radial Film Capacitor

DC Link Metallized Polypropylene



FEATURES

- METALLIZED POLYPROPYLENE FILM CAPACITORS
- DC-LINK APPLICATIONS
- LOW ESR & ESL HIGH RMS CURRENT RATING
- MOLDED BOX CONSTRUCTION
- AEC-Q200 QUALIFIED



SPECIFICATIONS

Specifications	Voltage Ratings (VDC)									
	+70°C Uop*	500	650	700	800	900	1000	1100	1200	1300
	+85°C Un**	450	550	600	700	800	900	1000	1100	1200
	+105°C Uop*	300	400	440	490	560	630	700	770	840
Capacitance Range (μF)	5.0 ~ 200	5.0 ~ 180	2.0 ~ 130	2.0 ~ 140	2.0 ~ 110	1.0 ~ 85	1.0 ~ 70	1.0 ~ 55	1.0 ~ 45	1.0 ~ 45
Available Capacitance Tolerance	±5% (J), ±10% (K), ±20% (M)									
Operating Temperature Range	-40°C ~ +105°C (derating voltage 1.25%/°C above +85°C)									
Withstanding Voltage @ +25°C	150% of RV for 10 sec. (between terminals) 3,000VAC 50/60Hz for 60 sec. (between terminals and case)									
Dissipation Factor @ 1KHz	≤0.002 (0.2%) @ 1KHz: ≤20μF at +25°C ≤0.003 (0.3%) @ 1KHz: >20μF at +25°C ≤0.004 (0.4%) @ 1KHz: >80μF at +25°C									
ESR @ 10KHz	See Part Number and Specifications Tables									
Insulation Resistance @ 100V +25°C ±5°C										
Climatic Category										
Operational Life Expectancy	40/105/56 (IEC 60068-1)									
UL Flammability Rating	100,000 hours @ +85°C (≤100FIT @ 85°C)									
Reference Standard	UL94V-0 (Epoxy Resin and Case)									
	IEC 61071, GBT 17701.1:2013									

*Uop = Operating Voltage (VDC)

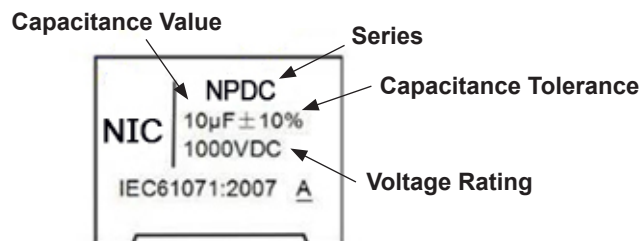
**Un = Rated Voltage (VDC)

PART NUMBER SYSTEM

NPDC 505 K 450 S 27R5 Q F

RoHS compliant
Q = AEC-Q200 Qualified
Lead-Space: 27R5 = 22.5mm
Construction: S = Single, D = Double
Voltage Rating: 450 = 450VDC, 550 = 550VDC, 600 = 600VDC, 700 = 700VDC, (Un @ 85°C) 1KV = 1,000VDC, 1K1V = 1,100VDC, 1K2V = 1,200VDC
Tolerance Code: J = ±5%, K = ±10%, M = ±20%
Cap. Value Code: 1st & 2nd significant figures, 3rd digit multiplier (225 = 2.2μF)
Series

PART MARKING



NPDC Series

Radial Film Capacitor

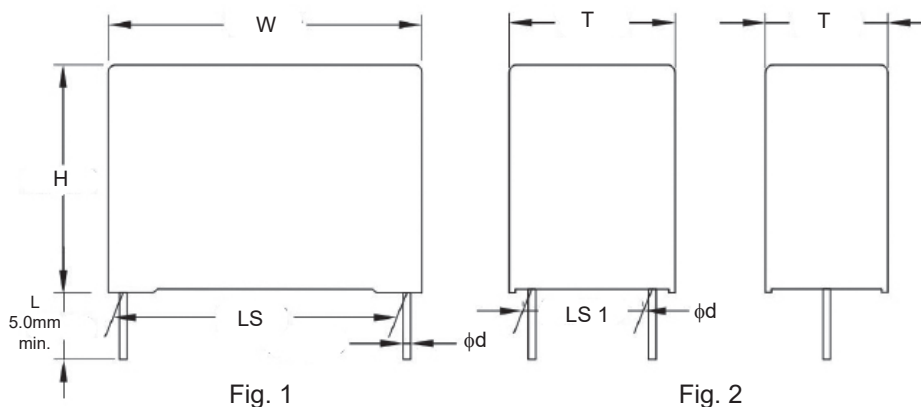
DC Link Metallized Polypropylene



NPDC SERIES (Uop: 500VDC at +70°C, Un: 450VDC at +85°C, Uop: 300VDC at +105°C)

NIC Part Number	Cap. (μF)	Tol. (%)	dv/dt (V/μS) max.	Ipeak (A) max.	ESR @ 10KHz (mΩ) max.	ESL (nH)	Irms @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (GΩ)	L ±1.0	H ±1.0	T ±1.0	LS ±0.5	LS 1 ±0.5	φd ±0.05	Fig. #
NPDC505K450S27R5QF	5	10	65	325	20.0	25	5.0	30.0	6.00	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC106K450S27R5QF	10	10	65	650	11.0	25	7.0	27.8	3.00	32.0	25.5	16.0	27.5	N/A	0.8	1
NPDC156K450S27R5QF	15	10	65	975	7.0	25	11.0	17.7	2.00	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC226K450S27R5QF	22	10	65	1430	5.0	28	11.0	24.8	1.36	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC256K450S27R5QF	25	10	65	1625	4.8	28	12.0	24.8	1.20	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC306K450D37R5QF	30	10	35	1050	7.5	30	12.5	12.8	1.00	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC356K450D37R5QF	35	10	35	1225	7.0	30	13.5	11.8	0.85	42.5	37.0	22.0	37.5	10.2	1.0	2
NPDC406K450D37R5QF	40	10	35	1400	6.2	30	14.5	11.5	0.75	42.5	37.0	28.0	37.5	10.2	1.0	2
NPDC506K450D37R5QF	50	10	35	1750	5.0	30	16.0	11.7	0.60	41.5	41.0	27.5	37.5	10.2	1.0	2
NPDC606K450D37R5QF	60	10	35	2100	4.5	30	16.5	12.2	0.50	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC756K450D52R5QF	75	10	20	1500	5.5	35	16.5	10.0	0.40	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC806K450D52R5QF	80	10	20	1600	5.0	35	17.0	10.4	0.37	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC107K450D52R5QF	100	10	20	2000	4.5	35	18.0	10.3	0.30	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC117K450D52R5QF	110	10	20	2200	4.0	35	19.0	10.4	0.27	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC127K450D52R5QF	120	10	20	2400	3.8	35	21.5	10.4	0.25	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC157K450D52R5QF	150	10	20	3000	3.6	35	24.5	10.4	0.20	57.5	65.0	35.0	52.5	20.3	1.2	2
NPDC167K450D52R5QF	160	10	20	3200	3.0	35	28.5	10.4	0.18	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC207K450D52R5QF	200	10	20	4000	2.6	35	33.0	10.4	0.15	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is $\Delta t = +15\%$ capacitance tolerance $\leq \pm 5\%$.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NPDC Series

Radial Film Capacitor

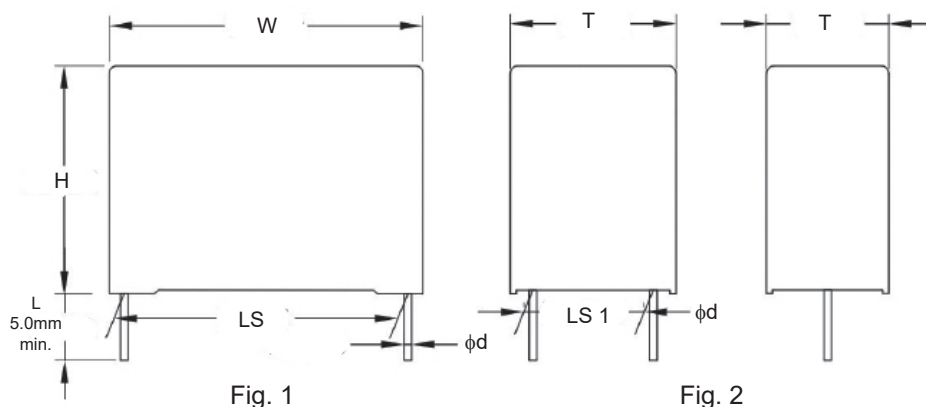
DC Link Metallized Polypropylene



NPDC SERIES (Uop: 650VDC at +70°C, Un: 550VDC at +85°C, Uop: 400VDC at +105°C)

NIC Part Number	Cap. (μ F)	Tol. (%)	dv/dt (V/ μ S) max.	Ipeak (A) max	ESR @ 10KHz (m Ω) max.	ESL (nH)	Irms @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (G Ω)	L $\pm$ 1.0	H $\pm$ 1.0	T $\pm$ 1.0	LS $\pm$ 0.5	LS 1 $\pm$ 0.5	ϕ d $\pm$ 0.05	Fig. #
NPDC505K550S27R5QF	5	10	65	325	19.5	25	5.5	25.4	6.00	31.5	21.6	13.0	27.5	N/A	0.8	1
NPDC106K550S27R5QF	10	10	65	650	10.5	25	7.5	25.4	3.00	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC156K550S27R5QF	15	10	65	975	6.8	28	11.5	16.7	2.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC226K550S27R5QF	22	10	65	1430	4.9	28	11.5	23.1	1.36	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC306K550D37R5QF	30	10	35	1050	7.2	30	13.0	12.3	1.00	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC356K550D37R5QF	35	10	35	1225	6.8	30	13.8	11.6	0.85	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC406K550D37R5QF	40	10	35	1400	6.0	30	14.8	11.4	0.75	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC756K550D52R5QF	75	10	20	1500	5.2	35	16.8	10.2	0.40	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC107K550D52R5QF	100	10	20	2000	4.3	35	18.5	10.2	0.30	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC117K550D52R5QF	110	10	20	2200	4.0	35	20.0	9.4	0.27	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC147K550D52R5QF	140	10	20	2800	3.5	35	26.0	6.3	0.21	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC177K550D52R5QF	170	10	20	3400	2.8	35	32.0	5.2	0.17	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC187K550D52R5QF	180	10	20	3600	2.6	35	33.0	5.2	0.16	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is $\Delta t = +15\%$ capacitance tolerance $\pm 5\%$.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

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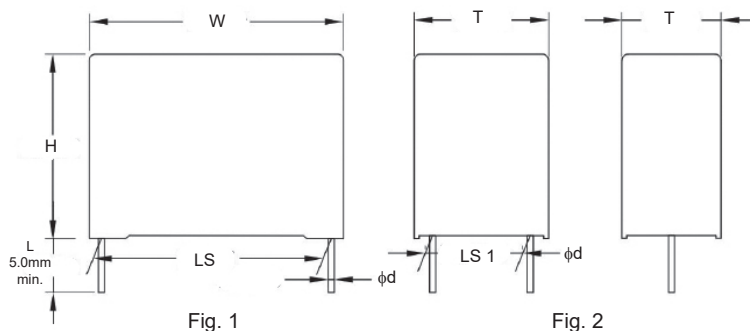
DC Link Metallized Polypropylene



NPDC SERIES (U_{op}: 700VDC at +70°C, U_n: 600VDC at +85°C, U_{op}: 440VDC at +105°C)

NIC Part Number	Cap. (μF)	Tol. (%)	dv/dt (V/μs) max.	I _{peak} (A) max.	ESR @ 10KHz (mΩ) max.	ESL (nH)	I _{rms} @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (GΩ)	L ±1.0	H ±1.0	T ±1.0	LS ±0.5	LS 1 ±0.5	φd ±0.05	Fig. #
NPDC205K600S27R5QF	2.0	10	65	130	40.0	25	2.9	44.6	15.0	32.0	18.0	9.0	27.5	N/A	0.8	1
NPDC305K600S27R5QF	3.0	10	65	195	28.0	25	4.0	33.5	10.0	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC405K600S27R5QF	4.0	10	65	260	23.0	25	5.5	21.6	7.50	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC505K600S27R5QF	5.0	10	65	325	14.5	25	7.0	21.1	6.00	31.5	21.6	13.0	27.5	N/A	0.8	1
NPDC605K600S27R5QF	6.0	10	65	390	13.0	25	7.3	21.7	5.00	32.0	25.5	16.0	27.5	N/A	0.8	1
NPDC705K600S27R5QF	7.0	10	65	455	12.0	25	8.5	17.3	4.28	32.0	25.5	16.0	27.5	N/A	0.8	1
NPDC805K600S27R5QF	8.0	10	65	520	11.0	25	9.5	15.1	3.75	32.0	28.0	14.0	27.5	N/A	0.8	1
NPDC905K600S27R5QF	9.0	10	65	585	10.5	25	10.5	13	3.33	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC106K600S27R5QF	10	10	65	650	10.0	25	11.0	12.4	3.00	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC126K600S27R5QF	12	10	65	780	9.5	25	12.0	11	2.50	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC156K600S27R5QF	15	10	65	975	9.5	28	12.0	11	2.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC156K600D27R5QF	15	10	65	975	7.0	28	14.5	10.2	2.00	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC186K600S27R5QF	18	10	65	1170	9.0	28	12.5	10.7	1.66	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC186K600D27R5QF	18	10	65	1170	6.0	28	16.5	9.2	1.66	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC106K600S37R5QF	10	10	35	350	18.0	28	7.0	17	3.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC126K600S37R5QF	12	10	35	420	12.0	28	8.0	19.5	2.50	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC156K600S37R5QF	15	10	35	525	11.0	28	9.5	15.1	2.00	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC206K600D37R5QF	20	10	35	700	9.0	30	12.5	10.7	1.50	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC226K600D37R5QF	22	10	35	770	8.0	30	13.5	10.3	1.36	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC256K600D37R5QF	25	10	35	875	7.0	30	15.5	8.9	1.20	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC306K600D37R5QF	30	10	35	1050	6.5	30	16.5	8.5	1.00	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC356K600D37R5QF	35	10	35	1225	6.0	30	18.5	7.3	0.85	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC406K600D37R5QF	40	10	35	1400	5.0	30	20.5	7.1	0.75	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC556K600D52R5QF	55	10	20	1100	6.2	35	17.0	8.4	0.54	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC606K600D52R5QF	60	10	20	1200	6.0	35	18.5	7.3	0.50	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC656K600D52R5QF	65	10	20	1300	5.5	35	20.0	6.8	0.46	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC706K600D52R5QF	70	10	20	1400	5.0	35	21.5	6.5	0.42	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC756K600D52R5QF	75	10	20	1500	4.5	35	23.5	6.0	0.40	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC806K600D52R5QF	80	10	20	1600	4.2	35	24.5	5.9	0.37	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC906K600D52R5QF	90	10	20	1800	4.0	35	26.0	5.5	0.33	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC107K600D52R5QF	100	10	20	2000	3.4	35	29.0	5.2	0.30	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC117K600D52R5QF	110	10	20	2200	3.0	35	30.0	5.6	0.27	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC127K600D52R5QF	120	10	20	2400	2.8	35	32.0	5.2	0.25	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC137K600D52R5QF	130	10	20	2600	2.6	35	33.0	5.3	0.23	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is Δt=+15% capacitance tolerance ≤ ±5%.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

Performance Passives By Design

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Last Updated 11/24/2025. Specification subject to change without notice. Please check web site for latest information.

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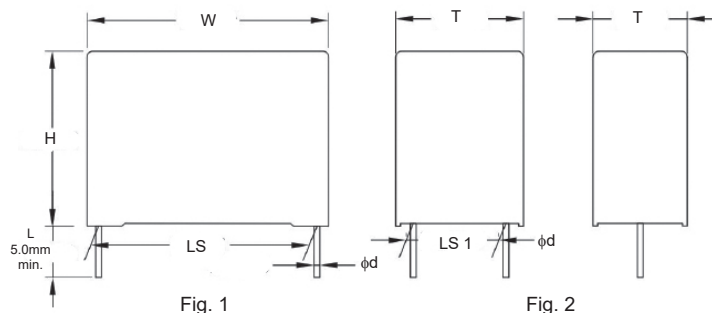
DC Link Metallized Polypropylene



NPDC SERIES (U_{op}: 800VDC at +70°C, U_n: 700VDC at +85°C, U_{op}: 490VDC at +105°C)

NIC Part Number	Cap. (μ F)	Tol. (%)	dv/dt (V/ μ S) max.	I _{peak} (A) max.	ESR @ 10KHz (m Ω) max.	ESL (nH)	I _{rms} @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (G Ω)	L $\pm$ 1.0	H $\pm$ 1.0	T $\pm$ 1.0	LS $\pm$ 0.5	LS 1 $\pm$ 0.5	ϕ d $\pm$ 0.05	Fig. #
NPDC205K700S27R5QF	2	10	65	130	40.0	25	2.9	44.6	15.0	32.0	18.0	9.0	27.5	N/A	0.8	1
NPDC305K700S27R5QF	3	10	65	195	28.0	25	4.0	33.5	10.0	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC405K700S27R5QF	4	10	65	260	23.0	25	5.5	21.6	7.50	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC505K700S27R5QF	5	10	65	325	14.5	25	7.0	21.1	6.00	31.5	21.6	13.0	27.5	N/A	0.8	1
NPDC605K700S27R5QF	6	10	65	390	13.0	25	7.3	21.7	5.00	32.0	25.5	16.0	27.5	N/A	0.8	1
NPDC705K700S27R5QF	7	10	65	455	12.0	25	8.5	17.3	4.28	32.0	25.5	16.0	27.5	N/A	0.8	1
NPDC805K700S27R5QF	8	10	65	520	11.0	25	9.5	15.1	3.75	32.0	28.0	14.0	27.5	N/A	0.8	1
NPDC905K700S27R5QF	9	10	65	585	10.5	25	10.5	13.0	3.33	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC106K700S27R5QF	10	10	65	650	10.0	25	11.0	12.4	3.00	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC126K700S27R5QF	12	10	65	780	9.5	25	12.0	11.0	2.50	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC156K700S27R5QF	15	10	65	975	9.5	28	12.0	11.0	2.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC156K700D27R5QF	15	10	65	975	7.0	28	14.5	10.2	2.00	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC186K700S27R5QF	18	10	65	1170	9.0	28	12.5	10.7	1.66	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC186K700D27R5QF	18	10	65	1170	6.0	28	16.5	9.2	1.66	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC106K700S37R5QF	10	10	35	350	18.0	28	7.0	17.0	3.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC126K700S37R5QF	12	10	35	420	12.0	28	8.0	19.5	2.50	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC156K700S37R5QF	15	10	35	525	11.0	28	9.5	15.1	2.00	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC206K700D37R5QF	20	10	35	700	9.0	30	12.5	10.7	1.50	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC226K700D37R5QF	22	10	35	770	8.0	30	13.5	10.3	1.36	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC256K700D37R5QF	25	10	35	875	7.0	30	15.5	8.9	1.20	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC306K700D37R5QF	30	10	35	1050	6.5	30	16.5	8.5	1.00	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC356K700D37R5QF	35	10	35	1225	6.0	30	18.5	7.3	0.85	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC406K700D37R5QF	40	10	35	1400	5.0	30	20.5	7.1	0.75	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC556K700D52R5QF	55	10	20	1100	6.2	35	17.0	8.4	0.54	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC606K700D52R5QF	60	10	20	1200	6.0	35	18.5	7.3	0.50	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC656K700D52R5QF	65	10	20	1300	5.5	35	20.0	6.8	0.46	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC706K700D52R5QF	70	10	20	1400	5.0	35	21.5	6.5	0.42	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC756K700D52R5QF	75	10	20	1500	4.5	35	23.5	6.0	0.40	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC806K700D52R5QF	80	10	20	1600	4.2	35	24.5	5.9	0.37	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC906K700D52R5QF	90	10	20	1800	4.0	35	26.0	5.5	0.33	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC107K700D52R5QF	100	10	20	2000	3.4	35	29.0	5.2	0.30	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC117K700D52R5QF	110	10	20	2200	3.0	35	30.0	5.6	0.27	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC127K700D52R5QF	120	10	20	2400	2.8	35	32.0	5.2	0.25	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC137K700D52R5QF	130	10	20	2600	2.6	35	33.0	5.3	0.23	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC147K700D52R5QF	140	10	20	2800	2.5	35	34.0	5.2	0.21	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is $\Delta t = +15\%$ capacitance tolerance $\pm 5\%$.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

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NPDC Series

Radial Film Capacitor

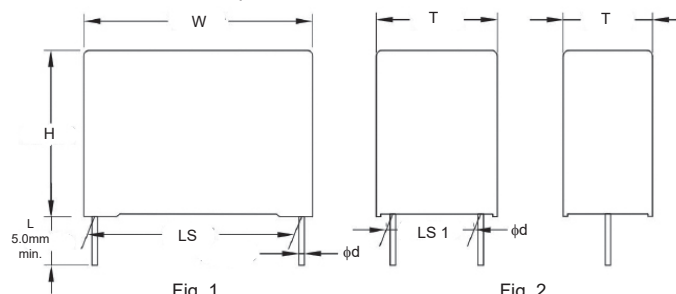
DC Link Metallized Polypropylene



NPDC SERIES (U_{op}: 900VDC at +70°C, Un: 800VDC at +85°C, U_{op}: 560VDC at +105°C)

NIC Part Number	Cap. (μF)	Tol. (%)	dv/dt (V/μS) max.	I _{peak} (A) max.	ESR @ 10KHz (mΩ) max.	ESL (nH)	I _{rms} @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (GΩ)	L ±1.0	H ±1.0	T ±1.0	LS ±0.5	LS 1 ±0.5	φd ±0.05	Fig. #
NPDC205K800S27R5QF	2	10	65	130	40.0	25	2.9	44.6	15.0	32.0	18.0	9.0	27.5	N/A	0.8	1
NPDC305K800S27R5QF	3	10	65	195	26.0	25	4.5	28.5	10.0	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC405K800S27R5QF	4	10	65	260	22.0	25	5.8	20.3	7.5	31.0	25.0	14.0	27.5	N/A	0.8	1
NPDC505K800S27R5QF	5	10	65	325	14.0	25	7.5	19.0	6.0	32.0	25.5	16.0	27.5	N/A	0.8	1
NPDC605K800S27R5QF	6	10	65	390	12.0	25	8.5	17.3	5.0	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC705K800S27R5QF	7	10	65	455	11.0	25	9.5	15.1	4.28	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC805K800S27R5QF	8	10	65	520	10.5	25	10.5	13.0	3.75	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC905K800S27R5QF	9	10	65	585	10.2	25	11.5	11.1	3.33	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC106K800S27R5QF	10	10	65	650	9.5	25	12.0	11.0	3.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC106K800D27R5QF	10	10	65	650	8.5	25	14.0	9.0	3.00	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC126K800S27R5QF	12	10	65	780	9.5	25	12.0	11.0	2.50	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC126K800D27R5QF	12	10	65	780	8.0	25	15.0	8.3	2.50	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC146K800S27R5QF	14	10	65	910	9.5	25	12.0	11.0	2.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC146K800D27R5QF	14	10	65	910	7.5	25	16.0	7.8	2.00	32.0	37.0	22.0	27.5	10.2	0.8	1
NPDC805K800S37R5QF	8	10	35	280	22.5	28	5.5	22.0	3.75	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC905K800S37R5QF	9	10	35	315	21.5	28	6.0	19.4	3.33	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC106K800S37R5QF	10	10	35	350	18.0	28	7.0	17.0	3.00	42.0	37.5	18.5	37.5	N/A	1.0	1
NPDC126K800S37R5QF	12	10	35	420	12.0	28	8.0	19.5	2.50	42.0	37.5	18.5	37.5	N/A	1.0	1
NPDC146K800S37R5QF	14	10	35	490	11.0	28	9.5	15.1	2.00	42.0	37.5	18.5	37.5	N/A	1.0	1
NPDC156K800D37R5QF	15	10	35	525	9.0	30	12.5	10.7	1.75	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC206K800D37R5QF	20	10	35	700	8.0	30	13.5	10.3	1.50	42.0	44.0	24.0	37.5	10.2	1.0	2
NPDC256K800D37R5QF	25	10	35	875	6.5	30	16.5	8.5	1.20	42.0	44.0	24.0	37.5	10.2	1.0	2
NPDC306K800D37R5QF	30	10	35	1050	5.8	30	20.0	6.5	1.00	41.5	45.0	30.0	37.5	27.5	1.0	2
NPDC406K800D52R5QF	40	10	20	800	8.5	35	14.0	9.0	0.75	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC456K800D52R5QF	45	10	20	900	7.0	35	15.5	8.9	0.70	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC506K800D52R5QF	50	10	20	1000	5.8	35	17.0	8.9	0.60	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC556K800D52R5QF	55	10	20	1100	5.5	35	19.0	7.6	0.54	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC606K800D52R5QF	60	10	20	1200	4.8	35	21.0	7.1	0.50	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC656K800D52R5QF	65	10	20	1300	4.6	35	22.5	6.4	0.46	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC706K800D52R5QF	70	10	20	1400	4.5	35	24.0	5.8	0.42	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC756K800D52R5QF	76	10	20	1500	4.3	35	25.5	5.4	0.40	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC806K800D52R5QF	80	10	20	1600	4.2	35	26.0	5.3	0.37	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC906K800D52R5QF	90	10	20	1800	4.0	35	27.5	5.0	0.33	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC107K800D52R5QF	100	10	20	2000	3.2	35	31.5	4.7	0.30	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC117K800D52R5QF	110	10	20	2200	3.0	35	34.0	4.3	0.27	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is Δt=+15% capacitance tolerance ≤ ±5%.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

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NPDC Series

Radial Film Capacitor

DC Link Metallized Polypropylene



NPDC SERIES (U_{op}: 1000VDC at +70°C, Un: 900VDC at +85°C, U_{op}: 630VDC at +105°C)

NIC Part Number	Cap. (μF)	Tol. (%)	dv/dt (V/μs) max.	I _{peak} (A) max.	ESR @ 10KHz (mΩ) max.	ESL (nH)	I _{rms} @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (GΩ)	L ±1.0	H ±1.0	T ±1.0	LS ±0.5	LS 1 ±0.5	φd ±0.05	Fig. #
NPDC105K900S27R5QF	1	10	70	70	65.0	25	2.0	57.7	30.0	32.0	18.0	9.0	27.5	N/A	0.8	1
NPDC205K900S27R5QF	2	10	70	140	38.0	25	3.2	38.5	15.0	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC305K900S27R5QF	3	10	70	210	30.0	25	4.8	21.7	10.0	31.5	21.6	13.0	27.5	N/A	0.8	1
NPDC405K900S27R5QF	4	10	70	280	20.5	25	6.0	20.3	7.50	31.0	25.0	14.0	27.5	N/A	0.8	1
NPDC505K900S27R5QF	5	10	70	350	12.0	25	7.5	22.2	6.00	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC605K900S27R5QF	6	10	70	420	11.5	25	7.8	21.4	5.00	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC705K900S27R5QF	7	10	70	490	10.2	25	10.5	13.3	4.28	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC805K900S27R5QF	8	10	70	560	9.0	25	12.5	10.7	3.75	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC805K900D27R5QF	8	10	70	560	9.0	25	12.5	10.7	3.75	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC905K900S27R5QF	9	10	70	630	9.7	25	11.8	11.1	3.33	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC905K900D27R5QF	9	10	70	630	7.8	25	14.0	9.8	3.33	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC106K900S27R5QF	10	10	70	700	9.5	25	12.0	11.0	3.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC106K900D27R5QF	10	10	70	700	7.2	25	15.5	8.7	3.00	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC505K900S37R5QF	5	10	35	175	28.0	28	3.8	37.1	6.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC605K900S37R5QF	6	10	35	210	25.0	28	4.5	29.6	5.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC705K900S37R5QF	7	10	35	245	22.0	28	5.0	27.3	4.28	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC805K900S37R5QF	8	10	35	280	19.5	28	6.0	21.4	3.75	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC106K900D37R5QF	10	10	35	350	13.0	30	7.5	20.5	3.00	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC126K900D37R5QF	12	10	35	420	11.5	30	9.0	16.1	2.50	42.5	37.0	22.0	37.5	10.2	1.0	2
NPDC156K900D37R5QF	15	10	35	525	10.5	30	10.5	13.0	2.00	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC186K900D37R5QF	18	10	35	630	8.8	30	13.0	10.1	1.66	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC206K900D37R5QF	20	10	35	700	7.5	30	14.5	9.5	1.50	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC256K900D37R5QF	25	10	35	875	6.2	30	17.5	7.9	1.20	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC306K900D52R5QF	30	10	20	600	10.0	35	11.0	12.4	1.00	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC356K900D52R5QF	35	10	20	700	9.0	35	12.5	10.7	0.85	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC406K900D52R5QF	40	10	20	800	7.5	35	14.5	9.5	0.75	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC456K900D52R5QF	45	10	20	900	6.8	35	16.0	8.6	0.66	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC506K900D52R5QF	50	10	20	1000	6.4	35	18.0	7.2	0.60	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC556K900D52R5QF	55	10	20	1100	5.6	35	20.0	6.7	0.54	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC606K900D52R5QF	60	10	20	1200	4.8	35	21.5	6.8	0.50	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC656K900D52R5QF	65	10	20	1300	4.5	35	23.0	6.3	0.46	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC706K900D52R5QF	70	10	20	1400	4.0	35	25.0	6.0	0.42	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC756K900D52R5QF	75	10	20	1500	3.9	35	25.5	5.9	0.40	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC806K900D52R5QF	80	10	20	1600	3.8	35	26.5	5.6	0.37	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC856K900D52R5QF	85	10	20	1700	3.6	35	28.5	5.1	0.35	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is Δt=+15% capacitance tolerance ≤ ±5%.

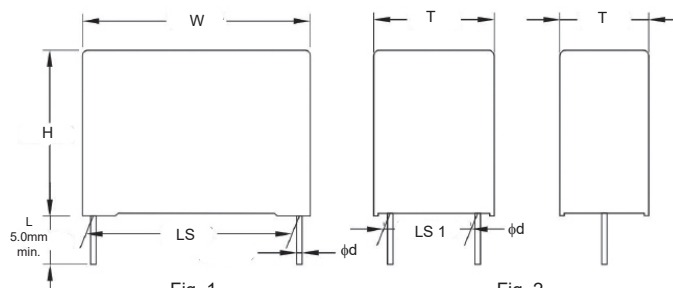


Fig. 1

Fig. 2

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

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NPDC Series

Radial Film Capacitor

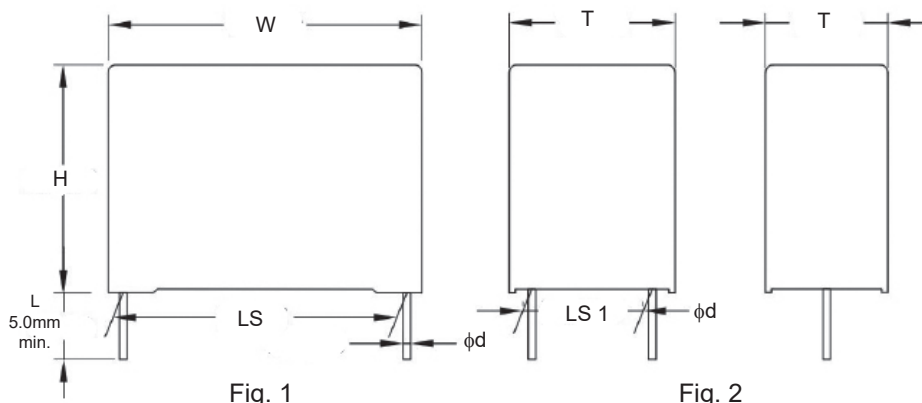
DC Link Metallized Polypropylene



NPDC SERIES (Uop: 1100VDC at +70°C, Un: 1000VDC at +85°C, Uop: 700VDC at +105°C)

NIC Part Number	Cap. (μF)	Tol. (%)	dv/dt (V/μS) max.	Ipeak (A) max.	ESR @ 10KHz (mΩ) max.	ESL (nH)	Irms @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (GΩ)	L ±1.0	H ±1.0	T ±1.0	LS ±0.5	LS 1 ±0.5	φd ±0.05	Fig. #
NPDC105K1KVS27R5QF	1	10	75	75	65.0	25	2.0	57.7	30.0	32.0	18.0	9.0	27.5	N/A	0.8	1
NPDC205K1KVS27R5QF	2	10	75	150	38.0	25	3.5	32.2	15.0	31.5	21.6	13.0	27.5	N/A	0.8	1
NPDC305K1KVS27R5QF	3	10	75	225	22.0	25	5.0	27.3	10.0	31.0	25.0	14.0	27.5	N/A	0.8	1
NPDC405K1KVS27R5QF	4	10	75	300	16.5	25	7.0	18.6	7.50	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC505K1KVS27R5QF	5	10	75	375	12.5	25	8.5	16.6	6.00	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC605K1KVS27R5QF	6	10	75	450	11.5	25	9.0	16.1	5.00	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC705K1KVS27R5QF	7	10	75	525	11.0	25	9.5	15.1	4.28	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC705K1KVD27R5QF	7	10	75	525	9.8	25	11.5	11.6	4.28	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC805K1KVS27R5QF	8	10	75	600	10.5	25	10.5	13	3.75	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC805K1KVD27R5QF	8	10	75	600	8.8	25	13.0	10.1	3.75	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC505K1KVS37R5QF	5	10	35	175	28.0	28	3.8	37.1	6.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC605K1KVS37R5QF	6	10	35	210	25.0	28	4.5	29.6	5.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC705K1KVS37R5QF	7	10	35	245	22.0	28	5.0	27.3	4.28	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC805K1KVS37R5QF	8	10	35	280	19.5	28	6.0	21.4	3.75	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC106K1KVD37R5QF	10	10	35	350	13.0	30	7.5	20.5	3.00	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC126K1KVD37R5QF	12	10	35	420	11.5	30	9.0	16.1	2.50	42.5	37.0	22.0	37.5	10.2	1.0	2
NPDC156K1KVD37R5QF	15	10	35	525	10.0	30	11.5	11.3	2.00	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC186K1KVD37R5QF	18	10	35	630	7.8	30	14.0	9.8	1.66	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC206K1KVD37R5QF	20	10	35	700	7.0	30	15.5	8.9	1.50	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC306K1KVD52R5QF	30	10	20	600	9.8	35	11.5	11.6	1.00	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC356K1KVD52R5QF	35	10	20	700	8.0	35	13.5	10.3	0.85	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC406K1KVD52R5QF	40	10	20	800	7.0	35	15.5	8.9	0.75	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC456K1KVD52R5QF	45	10	20	900	6.2	35	17.5	7.9	0.66	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC506K1KVD52R5QF	50	10	20	1000	5.8	35	19.5	6.8	0.60	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC556K1KVD52R5QF	55	10	20	1100	5.0	35	21.0	6.8	0.54	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC606K1KVD52R5QF	60	10	20	1200	4.6	35	23.0	6.2	0.50	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC656K1KVD52R5QF	65	10	20	1300	4.2	35	25.0	5.7	0.46	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC706K1KVD52R5QF	70	10	20	1400	3.8	35	27.0	5.4	0.42	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is $\Delta t = +15\%$ capacitance tolerance $\leq \pm 5\%$.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NPDC Series

Radial Film Capacitor

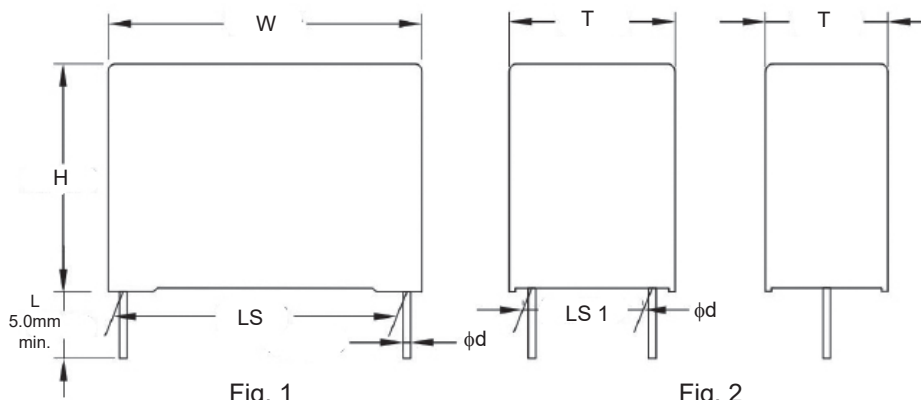
DC Link Metallized Polypropylene



NPDC SERIES (Uop: 1200VDC at +70°C, Un: 1100VDC at +85°C, Uop: 770VDC at +105°C)

NIC Part Number	Cap. (μ F)	Tol. (%)	dv/dt (V/ μ S) max.	I _{peak} (A) max.	ESR @ 10KHz (m Ω) max.	ESL (nH)	I _{rms} @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (G Ω)	L $\pm$ 1.0	H $\pm$ 1.0	T $\pm$ 1.0	LS $\pm$ 0.5	LS 1 $\pm$ 0.5	ϕ d $\pm$ 0.05	Fig. #
NPDC105K1K1VS27R5QF	1	10	80	80	65.0	25	2.2	47.7	30.00	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC155K1K1VS27R5QF	1.5	10	80	120	46.0	25	2.5	52.2	20.00	31.5	21.6	13.0	27.5	N/A	0.8	1
NPDC205K1K1VS27R5QF	2	10	80	160	24.5	25	4.8	26.6	15.00	31.0	25.0	14.0	27.5	N/A	0.8	1
NPDC305K1K1VS27R5QF	3	10	80	240	18.5	25	6.5	19.2	10.00	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC405K1K1VS27R5QF	4	10	80	320	12.5	25	8.5	16.6	7.50	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC505K1K1VS27R5QF	5	10	80	400	10.8	25	9.8	14.5	6.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC505K1K1VD27R5QF	5	10	80	400	10.5	25	10.5	13	6.00	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC605K1K1VS27R5QF	6	10	80	480	10.5	25	10.5	13	5.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC605K1K1VD27R5QF	6	10	80	480	8.8	25	13.0	10.1	5.00	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC305K1K1VS37R5QF	3	10	40	120	46.0	28	2.5	52.2	10.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC405K1K1VS37R5QF	4	10	40	160	32.5	28	3.5	37.7	7.50	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC475K1K1VS37R5QF	4.7	10	40	188	28.0	28	4.0	33.5	6.38	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC505K1K1VS37R5QF	5	10	40	200	26.0	28	4.2	32.7	6.00	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC605K1K1VS37R5QF	6	10	40	240	23.5	28	5.0	25.5	5.00	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC705K1K1VD37R5QF	7	10	40	280	18.5	30	6.0	22.5	4.28	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC805K1K1VD37R5QF	8	10	40	320	16.5	30	6.5	21.5	3.75	42.5	37.0	22.0	37.5	10.2	1.0	2
NPDC905K1K1VD37R5QF	9	10	40	360	13.0	30	7.5	20.5	3.33	42.5	37.0	22.0	37.5	10.2	1.0	2
NPDC106K1K1VD37R5QF	10	10	40	400	12.0	30	8.5	17.3	3.00	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC126K1K1VD37R5QF	12	10	40	480	10.8	30	10.0	13.9	2.50	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC146K1K1VD37R5QF	14	10	40	560	9.5	30	12.0	11	2.14	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC156K1K1VD37R5QF	15	10	40	600	8.5	30	13.0	10.4	2.00	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC206K1K1VD52R5QF	20	10	20	400	11.5	35	9.0	16.1	1.50	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC256K1K1VD52R5QF	25	10	20	500	10.0	35	11.0	12.4	1.20	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC306K1K1VD52R5QF	30	10	20	600	8.6	35	13.0	10.3	1.00	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC356K1K1VD52R5QF	35	10	20	700	7.5	35	14.5	9.5	0.85	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC406K1K1VD52R5QF	40	10	20	800	6.8	35	16.0	8.6	0.75	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC456K1K1VD52R5QF	45	10	20	900	6.2	35	17.5	7.9	0.66	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC506K1K1VD52R5QF	50	10	20	1000	5.6	35	19.5	7	0.60	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC566K1K1VD52R5QF	55	10	20	1100	4.8	35	21.5	6.8	0.54	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is $\Delta t = +15\%$ capacitance tolerance $\leq \pm 5\%$.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NPDC Series

Radial Film Capacitor

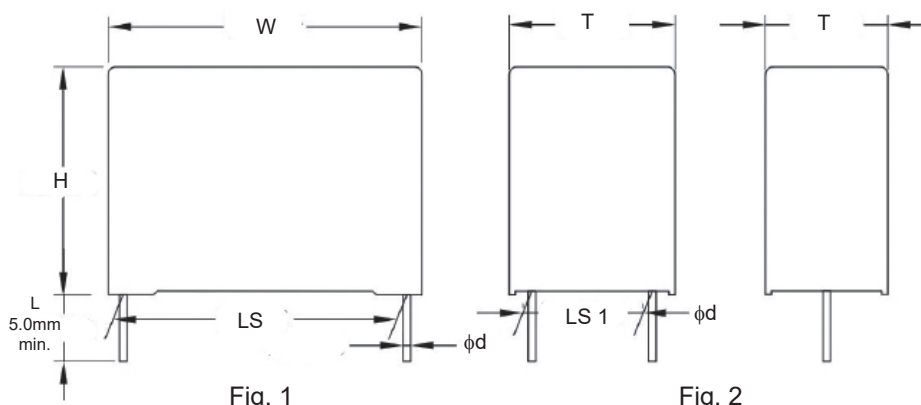
DC Link Metallized Polypropylene



NPDC SERIES (Uop: 1300VDC at +70°C, Un: 1200VDC at +85°C, Uop: 840VDC at +105°C)

NIC Part Number	Cap. (μF)	Tol. (%)	dv/dt (V/μS) max.	Ipeak (A) max.	ESR @ 10KHz (mΩ) max.	ESL (nH)	Irms @ 10KHz/70°C (A) max.	Thermal Res (°C/W)	IR (GΩ)	L ±1.0	H ±1.0	T ±1.0	LS ±0.5	LS 1 ±0.5	φd ±0.05	Fig. #
NPDC105K1K2VS27R5QF	1	10	90	90	35.0	25	3.5	35	30.0	32.0	20.0	11.0	27.5	N/A	0.8	1
NPDC205K1K2VS27R5QF	2	10	90	180	24.0	25	5.0	25	15.0	32.0	25.5	16.0	27.5	N/A	0.8	1
NPDC305K1K2VS27R5QF	3	10	90	270	13.0	25	7.5	20.5	10.0	32.0	30.0	15.0	27.5	N/A	0.8	1
NPDC405K1K2VS27R5QF	4	10	90	360	11.0	25	9.5	15.1	7.50	31.0	33.0	18.0	27.5	N/A	0.8	1
NPDC505K1K2VS27R5QF	5	10	90	450	10.5	25	10.5	13	6.00	32.0	37.0	22.0	27.5	N/A	0.8	1
NPDC505K1K2VD27R5QF	5	10	90	450	9.5	25	12.0	11	6.00	32.0	37.0	22.0	27.5	10.2	0.8	2
NPDC305K1K2VS37R5QF	3	10	45	135	35.0	28	3.2	41.9	10.00	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC405K1K2VS37R5QF	4	10	45	180	28.0	28	4.2	30.4	7.50	41.5	30.0	17.0	37.5	N/A	1.0	1
NPDC505K1K2VS37R5QF	5	10	45	225	21.5	28	5.5	23.1	6.00	42.0	33.5	18.5	37.5	N/A	1.0	1
NPDC605K1K2VD37R5QF	6	10	45	270	16.5	30	6.5	21.5	5.00	42.0	40.0	20.0	37.5	10.2	1.0	2
NPDC705K1K2VD37R5QF	7	10	45	315	13.0	30	7.5	20.5	4.28	42.5	37.0	22.0	37.5	10.2	1.0	2
NPDC805K1K2VD37R5QF	8	10	45	360	12.0	30	8.5	17.3	3.75	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC905K1K2VD37R5QF	9	10	45	405	10.8	30	10.0	13.9	3.33	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC106K1K2VD37R5QF	10	10	45	450	10.0	30	11.0	12.4	3.00	42.5	44.0	24.0	37.5	10.2	1.0	2
NPDC126K1K2VD37R5QF	12	10	45	540	8.5	30	13.0	10.4	2.50	41.5	45.0	30.0	37.5	20.3	1.0	2
NPDC206K1K2VD52R5QF	20	10	25	500	10.0	35	11.0	12.4	1.50	57.5	45.0	30.0	52.5	20.3	1.2	2
NPDC256K1K2VD52R5QF	25	10	25	625	8.6	35	13.0	10.3	1.20	57.5	50.0	35.0	52.5	20.3	1.2	2
NPDC306K1K2VD52R5QF	30	10	25	750	7.5	35	14.5	9.5	1.00	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC356K1K2VD52R5QF	35	10	25	875	6.8	35	16.0	8.6	0.85	58.0	55.0	45.0	52.5	20.3	1.2	2
NPDC406K1K2VD52R5QF	40	10	25	1000	5.5	35	20.0	6.8	0.75	58.0	67.0	45.0	52.5	20.3	1.2	2
NPDC456K1K2VD52R5QF	45	10	25	1125	4.8	35	22.5	6.2	0.66	58.0	67.0	45.0	52.5	20.3	1.2	2

*Maximum RMS current at 10KHz and +85°C is $\Delta t = +15\%$ capacitance tolerance $\leq \pm 5\%$.



Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NPDC Series

Radial Film Capacitor

DC Link Metallized Polypropylene



ENVIRONMENTAL TEST

ITEM	Specification	Test Method
Solderability	More than 95% of circumferential surface of lead wire shall be covered with new solder	Testing Method Per IEC 60068-2-20 Ta Soldering Temperature: +245 ±5°C Immersion Duration: 2 ±0.5 seconds
High Temperature Load Life	Capacitance Change Rate ($\Delta C/C$): ≤±5% DF change ($\Delta tg \delta$): ≤50*10 ⁻⁴ at 1 KHz. Insulation Resistance: ≥50% of initial limit	Testing method per IEC 61071 Test Temperature: +85 ±2°C. Apply 130% of rated voltage for 1,000 +24/-0 hours. Duration: 500 hours 1000 charges and discharges At 1.3 * I peak (maximum respective peak current in continuous operation)
Bump Test	Capacitance Change Rate ($\Delta C/C$): ≤±2% DF change ($\Delta tg \delta$): ≤50*10 ⁻⁴ at 1 KHz Insulation Resistance: ≥50% of initial limit	Pulse shape: half sine Acceleration: 490 m/s ² Duration of pulse: 11 ms
Humidity Resistance	Capacitance Change Rate ($\Delta C/C$): ≤±5% DF change ($\Delta tg \delta$): ≤50*10 ⁻⁴ at 1 KHz. Insulation Resistance: ≥50% of initial limit	Testing method per IEC 60068-2-3 Ca Test Temperature: +40 ±2°C Test Humidity: 90% to 95% R.H. Test Duration: 1344 +24/-0 hours
Cold Resistance	Capacitance Change Rate ($\Delta C/C$): ≤±3% DF change ($\Delta tg \delta$): ≤50*10 ⁻⁴ at 1 KHz Insulation Resistance: ≥50% of initial limit	Test Temperature: -40 ±2°C Test Duration: 2 +1/-0 hours
Dry Heat Resistance	Capacitance Change Rate: ($\Delta C/C$): ≤±3% DF change ($\Delta tg \delta$): ≤50*10 ⁻⁴ at 1 KHz. Insulation Resistance: ≥50% of initial limit	Test Temperature: +105 ±2°C Test Duration: 16 +1/-0 hours
Rapid Change in Temperature	Capacitance Change Rate ($\Delta C/C$): ≤±5% DF change ($\Delta tg \delta$): ≤50*10 ⁻⁴ at 1 KHz Insulation Resistance: ≥50% of initial limit	Testing method per IEC 68-2-14 Na. Test Temperature Cycle: Total 5 cycles High Temperature: +105 ±5°C Low Temperature: -40 ±5°C 30 min ±10% for each temperature
Resistance to Soldering Heat	Capacitance Change Rate ($\Delta C/C$): ≤±2% DF change ($\Delta tg \delta$): ≤50*10 ⁻⁴ at 1 KHz. Insulation Resistance: ≥50% of initial limit	Flow Soldering: Preheat Temperature 100°C~120°C Preheat Duration: 100 seconds Max. Soldering Temperature: +260 ±5°C Immersion Duration: ≤10 seconds Immersion Depth: 1.5 ±0.5 mm from roots. Iron Soldering: Soldering Temperature: +400°C Immersion Duration: ≤3 seconds After test, allow it stay alone for 1.5 ± 0.5 hours at standard temperature and humidity before making measurements.

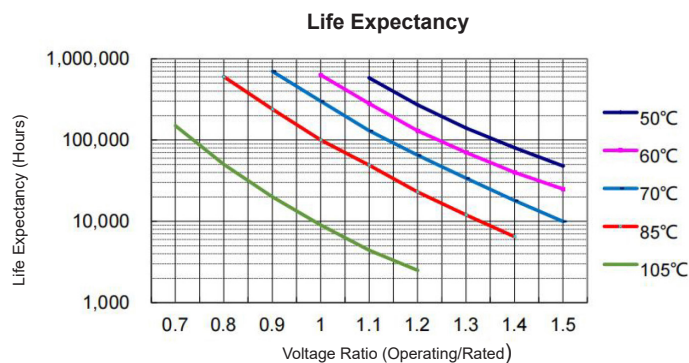
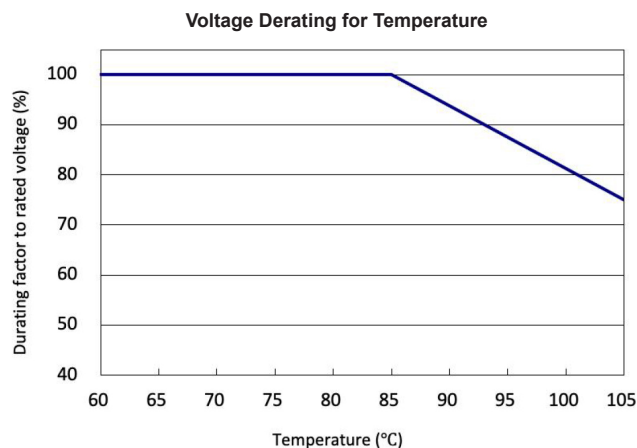
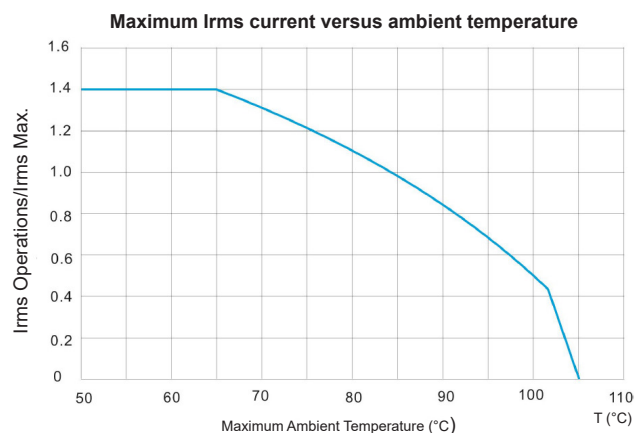
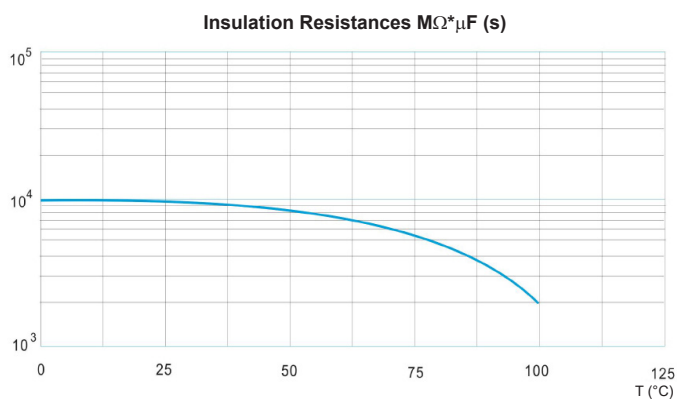
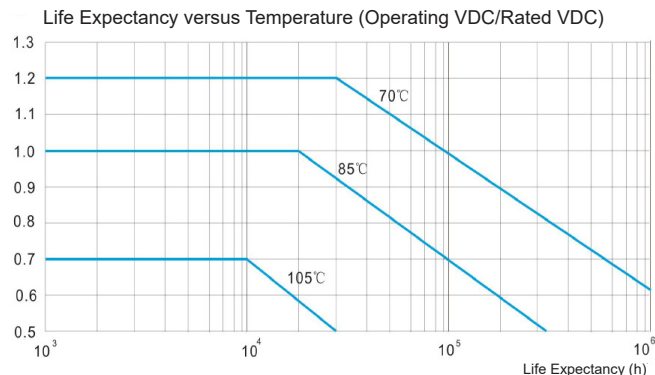
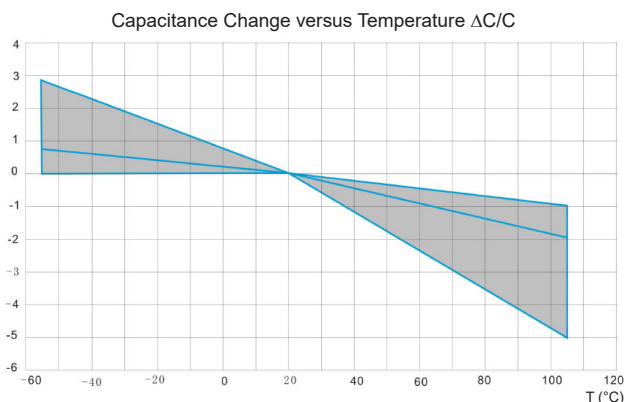
NPDC Series

Radial Film Capacitor

DC Link Metallized Polypropylene



NPDC PERFORMANCE CURVES



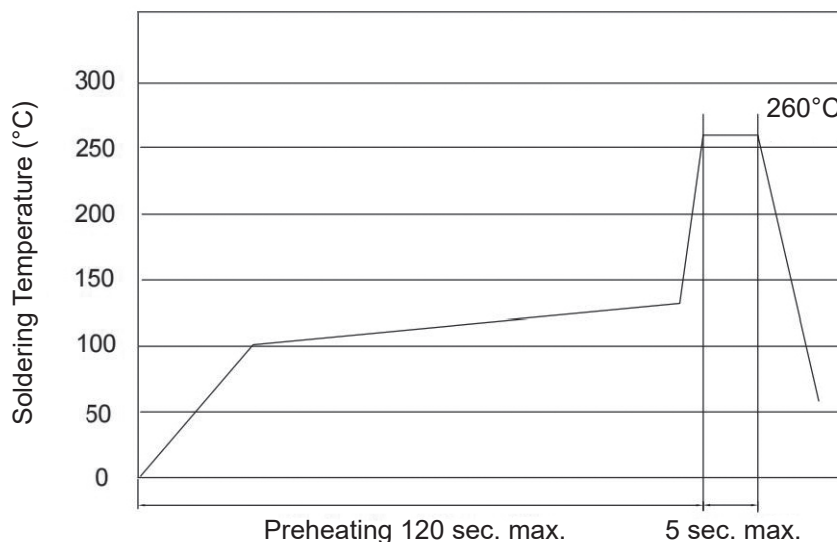
NPDC Series

Radial Film Capacitor

DC Link Metallized Polypropylene



FLOW SOLDERING PROFILE



BULK PACKAGE QUANTITY

Lead Space	Length	Height	Thickness	Quantity per Bag
27.5	32.0	18.0	9.0	720
	32.0	20.0	11.0	576
	31.5	21.6	13.0	504
	31.0	25.0	14.0	360
	32.0	28.0	14.0	360
	32.0	25.5	16.0	306
	32.0	30.0	15.0	270
	31.0	33.0	18.0	180
	32.0	37.0	22.0	156
37.5	42.0	33.5	18.5	135
	42.0	40.0	20.0	112
	42.5	37.0	22.0	120
	42.5	44.0	24.0	80
	42.5	37.0	28.0	80
	41.5	41.0	27.5	80
	41.5	45.0	30.0	72
	41.5	30.0	17.0	192
	57.5	45.0	30.0	42
52.5	57.5	50.0	35.0	40
	57.5	65.0	35.0	20
	58.0	55.0	45.0	32
	58.0	67.0	45.0	16

BOX SIZE (mm)

Inner Box Specifications				
BOX #	L ± 3	W ± 3	H ± 3	
# 1	290	220	75	
# 2	290	220	150	

Outer Box Specifications				
BOX #	L ± 5	W ± 5	H ± 5	
# A	450	300	245	
# B	450	300	320	