Type PPH, Double Metallized Polypropylene Film Pulse Capacitors

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified



The PPH series is constructed of metallized polypropylene film with double-sided metallized film encapsulated with epoxy resin in a plastic box, with 2 tinned copper wires. The PPH series is suitable for harsh environmental condition and qualify in accordance to AEC-Q200 requirement.

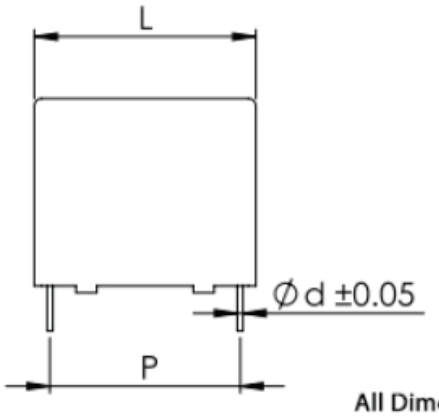
Highlights

- High ripple current
- Self healing property, low losses
- High contact reliability
- Operating temperature range: -55°C to 105°C
- Lead space (pitch): 15mm - 37.5mm
- Suitable for harsh environmental conditions
- THB 2000h 85°C 85% RH, 2000 hours, V_r
- Automotive Grade (AEC-Q200)

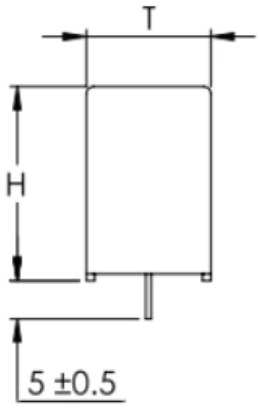
Specifications

Capacitance Range	0.001 to 4.7 µF
Capacitance Tolerance	±5% or ±10% at +25°C
Rated Voltage	630 to 2000 VDC
Operating Temperature Range	–55°C to 105°C (85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)
Dissipation factor	0.0010 (0.1%) at 25°C, 1kHz
Insulation Resistance	R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 100 000 MΩ RC between leads, for C > 0.33 µF at 100 V; 1 min > 30 000 s
Test Voltage between Terminals V_{tt}	1.5 x V_r VDC for 10 s (between terminations) @ +25°C ±5°C
Test Voltage between Terminals & Case V_{tc}	3000VAC, 60s(at+20+/-2°C)
Life Test	2,000 h @ 85°C, 125% rated DC voltage
Life Expectancy	100,000 h (V_r, T_{HS}=85°C)
Regulatory Information	

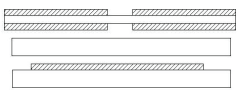
Dimensions



All Dimensions in mm



Construction Diagram



---- Double Metallized Polyester
---- Polypropylene
---- Metallized Polypropylene

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

Part Numbering System

PPH	105	K	102	G20
Series	Capacitance	Tolerance	Voltage	Case size
PPH	EIA Cap Code 124 = 0.12 µF 105 = 1.0 µF 156 = 15 µF	K = ±10% Standard J = ±5% Optional	600 = 600VDC 102 = 1000VDC	See Size Code Table

Size and Code Table

Size	Dimensions (mm)						Pitch (mm)	Lead Wire (mm)
Code	L	Tol. ±	H	Tol. ±	T	Tol. ±	P	Ød
E10	18	0.5	11	0.5	5	0.5	15	0.8
E11	18	0.5	12	0.5	6	0.5	15	0.8
E15	18	0.5	13	0.5	7	0.5	15	0.8
E13	18	0.5	13.5	0.5	7.5	0.5	15	0.8
E14	18	0.5	14.5	0.5	8.5	0.5	15	0.8
E16	18	0.5	16	0.5	9	0.5	15	0.8
E20	18	0.5	16	0.5	10	0.5	15	0.8
E21	18	0.5	19	0.5	11	0.5	15	0.8
G10	26	0.5	15.5	0.5	6	0.5	22.5	0.8
G11	26	0.5	16.5	0.5	7	0.5	22.5	0.8
G12	26	0.5	17	0.5	8.5	0.5	22.5	0.8
G20	26	0.5	19	0.5	10	0.5	22.5	0.8
G21	26	0.5	20	0.5	11	0.5	22.5	0.8
G22	26	0.5	22	0.5	12	0.5	22.5	0.8
G26	26	0.8	25	0.8	13	0.8	22.5	0.8
G24	26	0.5	30	0.5	15	0.5	22.5	0.8
H10	32	0.8	17	0.8	8	0.8	27.5	0.8
H11	32	0.8	18	0.8	9	0.8	27.5	0.8
H20	32	0.8	20	0.8	11	0.8	27.5	0.8
H21	32	0.8	22	0.8	13	0.8	27.5	0.8
H22	32	0.8	24.5	0.8	13	0.8	27.5	0.8
H23	32	0.8	24.0	0.8	14	0.8	27.5	0.8
H24	32	0.8	28	0.8	14	0.8	27.5	0.8
H26	32	0.8	30	0.8	16	0.8	27.5	0.8
H28	32	0.8	33	0.8	18	0.8	27.5	0.8
H30	32	0.8	37	0.8	22	0.8	27.5	0.8
N21	42	0.8	24	0.8	13	0.8	37.5	1.0
N24	42	0.8	28	0.8	17	0.8	37.5	1.0
N26	42	0.8	32	0.8	19	0.8	37.5	1.0
N30	42	0.8	40	0.8	20	0.8	37.5	1.0
N32	42	0.8	44	0.8	24	0.8	37.5	1.0
N40	42	0.8	45	0.8	30	0.8	37.5	1.0
N41	42	0.8	50	0.8	35	0.8	37.5	1.0
N20	42	0.8	22	0.8	11	0.8	37.5	1.0
N22	42	0.8	28.5	0.8	16	0.8	37.5	1.0
N34	42	0.8	43	0.8	28	0.8	37.5	1.0

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

Ratings

		Dimensions										
Part Number	Cap (µF)	L (mm)	H (mm)	T (mm)	P (mm)	Ød (mm)	Irms Max 70°C, 100kHz (A)	Peak Current (A)	Surge Current (A)	ESR typ 100kHz (mΩ)	ESL (nH)	dV/dt (V/µs)
630 VDC / 400VAC												
PPH103K630E10	0.010	18	11	5	15	0.8	2.1	30	90	73.6	10	3000
PPH123K630E10	0.012	18	11	5	15	0.8	2.3	36	108	61.4	10	3000
PPH153K630E10	0.015	18	11	5	15	0.8	2.6	45	135	49.1	10	3000
PPH183K630E10	0.018	18	11	5	15	0.8	2.8	54	162	40.9	10	3000
PPH203K630E10	0.020	18	11	5	15	0.8	3	60	180	36.8	10	3000
PPH223K630E10	0.022	18	11	5	15	0.8	3.1	66	198	33.5	10	3000
PPH273K630E11	0.027	18	12	6	15	0.8	3.6	81	243	27.3	10	3000
PPH333K630E11	0.033	18	12	6	15	0.8	4	99	297	22.3	10	3000
PPH393K630E11	0.039	18	12	6	15	0.8	4.4	117	351	18.9	10	3000
PPH473K630E13	0.047	18	13.5	7.5	15	0.8	5	141	423	15.7	10	3000
PPH473K630G10	0.047	26	15.5	6	22.5	0.8	3.8	71	212	32.2	16	1500
PPH563K630E13	0.056	18	13.5	7.5	15	0.8	5.4	168	504	13.1	10	3000
PPH563K630G10	0.056	26	15.5	6	22.5	0.8	4.1	84	252	27	16	1500
PPH683K630E14	0.068	18	14.5	8.5	15	0.8	5.6	204	612	13	10	3000
PPH683K630G10	0.068	26	15.5	6	22.5	0.8	4.5	102	306	22.2	16	1500
PPH823K630E20	0.082	18	16	10	15	0.8	6.5	246	738	10.8	10	3000
PPH823K630G10	0.082	26	15.5	6	22.5	0.8	5	123	369	18.4	16	1500
PPH104K630E20	0.10	18	16	10	15	0.8	7.1	300	900	8.8	10	3000
PPH104K630G10	0.10	26	15.5	6	22.5	0.8	5.5	150	450	15.1	16	1500
PPH124K630E21	0.12	18	19	11	15	0.8	8.2	360	1080	7.4	10	3000
PPH124K630G11	0.12	26	16.5	7	22.5	0.8	6.2	180	540	12.6	16	1500
PPH154K630G12	0.15	26	17	8.5	22.5	0.8	7	225	675	10.1	16	1500
PPH154K630H10	0.15	32	17	8	27.5	0.8	5.4	135	405	19.6	18	900
PPH184K630G12	0.18	26	17	8.5	22.5	0.8	7.1	270	810	9.8	16	1500
PPH184K630H10	0.18	32	17	8	27.5	0.8	5.9	162	486	16.3	18	900
PPH224K630G20	0.22	26	19	10	22.5	0.8	7.9	330	990	9.2	16	1500
PPH224K630H11	0.22	32	18	9	27.5	0.8	6.5	198	594	11.4	18	900
PPH274K630G21	0.27	26	20	11	22.5	0.8	7.3	405	1215	11.2	16	1500
PPH274K630H20	0.27	32	20	11	27.5	0.8	7.8	243	729	9.3	18	900
PPH334K630G21	0.33	26	20	11	22.5	0.8	8	495	1485	9.2	16	1500
PPH334K630H20	0.33	32	20	11	27.5	0.8	8.6	297	891	7.6	18	900
PPH334K630N20	0.33	42	22	11	37.5	1.0	8.6	165	495	8.9	20	500
PPH394K630G22	0.39	26	22	12	22.5	0.8	8.9	585	1755	7.8	16	1500
PPH394K630H20	0.39	32	20	11	27.5	0.8	9.3	351	1053	6.4	18	900
PPH474K630H21	0.47	32	22	13	27.5	0.8	9.8	423	1269	6.2	18	900
PPH474K630N20	0.47	42	22	11	37.5	1.0	10.3	235	705	6.2	20	500
PPH564K630H21	0.56	32	22	13	27.5	0.8	10.7	504	1512	5.2	18	900
PPH564K630N20	0.56	42	22	11	37.5	1.0	11.2	280	840	5.2	20	500
PPH684K630H22	0.68	32	24.5	13	27.5	0.8	11.4	612	1836	4.9	18	900
PPH684K630N20	0.68	42	22	11	37.5	1.0	10.7	340	1020	5.7	20	500

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

Part Number	Cap (µF)	Dimensions L (mm)	H (mm)	T (mm)	P (mm)	Ød (mm)	Irms Max 70ºC, 100kHz (A)	Peak Current (A)	Surge Current (A)	ESR typ 100kHz (mΩ)	ESL (nH)	dV/dt (V/µs)
630 VDC / 400VAC												
PPH824K630H24	0.82	32	28	14	27.5	0.8	12.5	738	2214	4.6	18	900
PPH824K630N22	0.82	42	28.5	16	37.5	1.0	11.8	410	1230	7.1	20	500
PPH105K630H28	1.0	32	33	18	27.5	0.8	13.5	900	2700	5	18	900
PPH105K630N22	1.0	42	28.5	16	37.5	1.0	12.1	500	1500	6.8	20	500
PPH125K630H28	1.2	32	33	18	27.5	0.8	12.8	1080	3240	5.6	18	900
PPH155K630H30	1.5	32	37	22	27.5	1.0	14.4	1350	4050	5.6	18	900
PPH155K630N22	1.5	42	28.5	16	37.5	1.0	13.1	750	2250	5.9	20	500
PPH185K630H30	1.8	32	37	22	27.5	1.0	14.7	1620	4860	5.4	18	900
PPH185K630N26	1.8	42	32	19	37.5	1.0	13.7	900	2700	6	20	500
PPH225K630N30	2.2	42	40	20	37.5	1.0	14.2	1100	3300	7.1	20	500
PPH275K630N30	2.7	42	40	20	37.5	1.0	14.9	1350	4050	6.5	20	500
PPH335K630N32	3.3	42	44	24	37.5	1.0	15.2	1650	4950	7.1	20	500
PPH395K630N40	3.9	42	45	30	37.5	1.0	15.8	1950	5850	8	20	500
PPH475K630N41	4.7	42	50	35	37.5	1.0	16	2350	7050	9.3	20	500
1000 Vdc (600 Vac)												
PPH822K102E10	0.0082	18	11	5	15	0.8	2	29	86	79.8	10	3500
PPH103K102E10	0.010	18	11	5	15	0.8	2.2	35	105	65.4	10	3500
PPH123K102E10	0.012	18	11	5	15	0.8	2.5	42	126	54.5	10	3500
PPH153K102E10	0.015	18	11	5	15	0.8	2.8	53	158	43.6	10	3500
PPH183K102E10	0.018	18	11	5	15	0.8	3	63	189	36.4	10	3500
PPH203K102E11	0.020	18	12	6	15	0.8	3.3	70	210	32.7	10	3500
PPH223K102E11	0.022	18	12	6	15	0.8	3.5	77	231	29.7	10	3500
PPH273K102E13	0.027	18	13.5	7.5	15	0.8	4	95	284	24.2	10	3500
PPH273K102G10	0.027	26	15.5	6	22.5	0.8	3.5	57	170	37.3	16	2100
PPH333K102E13	0.033	18	13.5	7.5	15	0.8	4.4	116	347	19.8	10	3500
PPH333K102G10	0.033	26	15.5	6	22.5	0.8	4.3	69	208	25.5	16	2100
PPH393K102E14	0.039	18	14.5	8.5	15	0.8	4.9	137	410	16.8	10	3500
PPH393K102G10	0.039	26	15.5	6	22.5	0.8	4.6	82	246	21.6	16	2100
PPH473K102E14	0.047	18	14.5	8.5	15	0.8	5.4	165	494	13.9	10	3500
PPH473K102G11	0.047	26	16.5	7	22.5	0.8	5.2	99	296	17.9	16	2100
PPH563K102G11	0.056	26	16.5	7	22.5	0.8	5.2	118	353	18	16	2100
PPH683K102G12	0.068	26	17	8.5	22.5	0.8	5.4	143	428	17.3	16	2100
PPH823K102G20	0.082	26	19	10	22.5	0.8	6.3	172	517	14.3	16	2100
PPH104K102G20	0.10	26	19	10	22.5	0.8	7	210	630	11.8	16	2100
PPH104K102H10	0.10	32	17	8	27.5	0.8	6.3	100	300	14	18	1000
PPH124K102G21	0.12	26	20	11	22.5	0.8	7.8	252	756	9.8	16	2100
PPH124K102H11	0.12	32	18	9	27.5	0.8	6.4	120	360	11.6	18	1000
PPH154K102G22	0.15	26	22	12	22.5	0.8	8.9	315	945	7.8	16	2100
PPH154K102H20	0.15	32	20	11	27.5	0.8	7.8	150	450	9.3	18	1000
PPH184K102H21	0.18	32	22	13	27.5	0.8	8	180	540	9.3	18	1000

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

		Dimensions										
Part Number	Cap (µF)	L (mm)	H (mm)	T (mm)	P (mm)	Ød (mm)	Irms Max 70ºC, 100kHz (A)	Peak Current (A)	Surge Current (A)	ESR typ 100kHz (mΩ)	ESL (nH)	dV/dt (V/µs)
1000 Vdc (600 Vac)												
PPH184K102N20	0.18	42	22	11	37.5	1.0	6.8	90	270	14.5	20	500
PPH224K102H21	0.22	32	22	13	27.5	0.8	8.2	220	660	8.9	18	1000
PPH224K102N20	0.22	42	22	11	37.5	1.0	7.5	110	330	11.8	20	500
PPH274K102H22	0.27	32	24.5	13	27.5	0.8	9.4	270	810	7.2	18	1000
PPH274K102N21	0.27	42	24	13	37.5	1.0	8.6	135	405	9.6	20	500
PPH334K102H24	0.33	32	28	14	27.5	0.8	9.7	330	990	7.6	18	1000
PPH334K102N21	0.33	42	24	13	37.5	1.0	9.6	165	495	7.9	20	500
PPH394K102H28	0.39	32	33	18	27.5	0.8	10.8	390	1170	7.9	18	1000
PPH394K102N24	0.39	42	28	17	37.5	1.0	10	195	585	10	20	500
PPH474K102H28	0.47	32	33	18	27.5	0.8	11.4	470	1410	7.1	18	1000
PPH474K102N24	0.47	42	28	17	37.5	1.0	10.2	235	705	9.7	20	500
PPH564K102H30	0.56	32	37	22	27.5	1.0	12.9	560	1680	7	18	1000
PPH564K102N24	0.56	42	28	17	37.5	1.0	11.1	280	840	8.1	20	500
PPH684K102H30	0.68	32	37	22	27.5	1.0	13.7	680	2040	6.2	18	1000
PPH684K102N26	0.68	42	32	19	37.5	1.0	12.9	340	1020	6.7	20	500
PPH824K102N30	0.82	42	40	20	37.5	1.0	13.5	410	1230	7.9	20	500
PPH105K102N30	1.0	42	40	20	37.5	1.0	13.6	500	1500	7.8	20	500
PPH125K102N32	1.2	42	44	24	37.5	1.0	14.7	600	1800	7.6	20	500
PPH155K102N32	1.5	42	44	24	37.5	1.0	15.9	750	2250	6.5	20	500
PPH185K102N40	1.8	42	45	30	37.5	1.0	16.6	900	2700	7.2	20	500
PPH225K102N40	2.2	42	45	30	37.5	1.0	16.8	1100	3300	7.1	20	500
1300 Vdc (620 Vac)												
PPH822K132E10	0.0082	18	11	5	15	0.8	2.1	29	86	73.6	10	3500
PPH103K132E10	0.010	18	11	5	15	0.8	2.3	35	105	60.4	10	3500
PPH123K132E10	0.012	18	11	5	15	0.8	2.6	42	126	50.3	10	3500
PPH153K132E10	0.015	18	11	5	15	0.8	2.9	53	158	40.2	10	3500
PPH183K132E11	0.018	18	12	6	15	0.8	3.3	63	189	33.5	10	3500
PPH203K132E11	0.020	18	12	6	15	0.8	3.5	70	210	30.2	10	3500
PPH223K132E15	0.022	18	13	7	15	0.8	3.7	77	231	27.4	10	3500
PPH273K132E13	0.027	18	13.5	7.5	15	0.8	4.2	95	284	22.3	10	3500
PPH273K132G10	0.027	26	15.5	6	22.5	0.8	3.5	57	170	36.9	16	2100
PPH333K132E14	0.033	18	14.5	8.5	15	0.8	4.7	116	347	18.3	10	3500
PPH333K132G10	0.033	26	15.5	6	22.5	0.8	4.3	69	208	25.2	16	2100
PPH393K132E16	0.039	18	16	9	15	0.8	5.3	137	410	15.5	10	3500
PPH393K132G10	0.039	26	15.5	6	22.5	0.8	4.6	82	246	21.3	16	2100
PPH473K132E20	0.047	18	16	10	15	0.8	5.9	165	494	12.8	10	3500
PPH473K132G11	0.047	26	16.5	7	22.5	0.8	5.2	99	296	17.7	16	2100
PPH563K132E21	0.056	18	19	11	15	0.8	6.8	196	588	10.8	10	3500
PPH563K132G11	0.056	26	16.5	7	22.5	0.8	5.2	118	353	17.8	16	2100
PPH683K132G12	0.068	26	17	8.5	22.5	0.8	5.4	143	428	17.1	16	2100

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

	Dimensions											
Part Number	Cap (µF)	L (mm)	H (mm)	T (mm)	P (mm)	Ød (mm)	Irms Max 70ºC, 100kHz (A)	Peak Current (A)	Surge Current (A)	ESR typ 100kHz (mΩ)	ESL (nH)	dV/dt (V/µs)
1300 Vdc (620 Vac)												
PPH823K132G20	0.082	26	19	10	22.5	0.8	6.3	172	517	14.2	16	2100
PPH104K132G20	0.10	26	19	10	22.5	0.8	7	210	630	11.6	16	2100
PPH104K132H10	0.10	32	17	8	27.5	0.8	6.4	100	300	13.6	18	1000
PPH124K132G21	0.12	26	20	11	22.5	0.8	7.8	252	756	9.7	16	2100
PPH124K132H11	0.12	32	18	9	27.5	0.8	6.5	120	360	11.3	18	1000
PPH154K132G22	0.15	26	22	12	22.5	0.8	8.9	315	945	7.8	16	2100
PPH154K132H20	0.15	32	20	11	27.5	0.8	7.9	150	450	9.1	18	1000
PPH184K132G26	0.18	26	24.5	13	22.5	0.8	9.3	378	1134	7.4	16	2100
PPH184K132H21	0.18	32	22	13	27.5	0.8	8.1	180	540	9.1	18	1000
PPH184K132N20	0.18	42	22	11	37.5	1.0	6.9	90	270	13.8	20	500
PPH224K132G24	0.22	26	29.5	14.5	22.5	0.8	10.1	462	1386	6.8	16	2100
PPH224K132H21	0.22	32	22	13	27.5	0.8	8.3	220	660	8.6	18	1000
PPH224K132N20	0.22	42	22	11	37.5	1.0	7.6	110	330	11.3	20	500
PPH274K132H23	0.27	32	24	14	27.5	0.8	9.8	270	810	7	18	1000
PPH274K132N21	0.27	42	24	13	37.5	1.0	8.8	135	405	9.2	20	500
PPH334K132H24	0.33	32	28	14	27.5	0.8	9.9	330	990	7.4	18	1000
PPH334K132N21	0.33	42	24	13	37.5	1.0	9.8	165	495	7.5	20	500
PPH394K132H26	0.39	32	30	16	27.5	0.8	10	390	1170	7.7	18	1000
PPH394K132N24	0.39	42	28	17	37.5	1.0	10.2	195	585	9.6	20	500
PPH474K132H28	0.47	32	33	18	27.5	0.8	11.5	470	1410	6.9	18	1000
PPH474K132N24	0.47	42	28	17	37.5	1.0	10.4	235	705	9.3	20	500
PPH564K132H30	0.56	32	37	22	27.5	1.0	13.1	560	1680	6.8	18	1000
PPH564K132N24	0.56	42	28	17	37.5	1.0	11.3	280	840	7.8	20	500
PPH684K132H30	0.68	32	37	22	27.5	1.0	13.9	680	2040	6	18	1000
PPH684K132N26	0.68	42	32	19	37.5	1.0	13.2	340	1020	6.4	20	500
PPH824K132N30	0.82	42	40	20	37.5	1.0	13.8	410	1230	7.6	20	500
PPH105K132N30	1.0	42	40	20	37.5	1.0	13.9	500	1500	7.5	20	500
PPH125K132N32	1.2	42	44	24	37.5	1.0	14.1	600	1800	8.3	20	500
PPH155K132N34	1.5	42	43	28	37.5	1.0	15.1	750	2250	7.5	20	500
PPH185K132N40	1.8	42	45	30	37.5	1.0	15.5	900	2700	8.3	20	500
1600 Vdc (650 Vac)												
PPH332K162E10	0.0033	18	11	5	15	0.8	1.5	20	59	148.8	10	6000
PPH472K162E10	0.0047	18	11	5	15	0.8	1.8	28	85	104.4	10	6000
PPH562K162E10	0.0056	18	11	5	15	0.8	1.9	34	101	87.6	10	6000
PPH682K162E10	0.0068	18	11	5	15	0.8	2.1	41	122	76.9	10	6000
PPH822K162E10	0.0082	18	11	5	15	0.8	2.3	49	148	63.8	10	6000
PPH103K162E10	0.010	18	11	5	15	0.8	2.5	60	180	52.3	10	6000
PPH123K162E11	0.012	18	12	6	15	0.8	2.9	72	216	43.6	10	6000
PPH153K162E11	0.015	18	12	6	15	0.8	3	90	270	39.2	10	6000
PPH153K162G10	0.015	26	15.5	6	22.5	0.8	2.9	45	135	54.1	16	3000
PPH183K162E13	0.018	18	13.5	7.5	15	0.8	3.5	108	324	32.7	10	6000

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

		Dimensions										
Part Number	Cap (µF)	L (mm)	H (mm)	T (mm)	P (mm)	Ød (mm)	Irms Max 70ºC, 100kHz (A)	Peak Current (A)	Surge Current (A)	ESR typ 100kHz (mΩ)	ESL (nH)	dV/dt (V/µs)
1600 Vdc (650 Vac)												
PPH223K162E13	0.022	18	13.5	7.5	15	0.8	3.8	132	396	26.7	10	6000
PPH223K162G10	0.022	26	15.5	6	22.5	0.8	3.5	66	198	36.8	16	3000
PPH273K162E14	0.027	18	14.5	8.5	15	0.8	4.3	162	486	21.8	10	6000
PPH333K162E14	0.033	18	14.5	8.5	15	0.8	4.8	198	594	17.8	10	6000
PPH333K162G10	0.033	26	15.5	6	22.5	0.8	4.3	99	297	24.6	16	3000
PPH393K162G11	0.039	26	16.5	7	22.5	0.8	4.8	117	351	20.8	16	3000
PPH393K162H10	0.039	32	17	8	27.5	0.8	4.4	78	234	28.3	18	2000
PPH473K162G11	0.047	26	16.5	7	22.5	0.8	5.3	141	423	17.2	16	3000
PPH473K162H10	0.047	32	17	8	27.5	0.8	4.9	94	282	23.5	18	2000
PPH563K162G12	0.056	26	17	8.5	22.5	0.8	5.4	168	504	16.9	16	3000
PPH563K162H10	0.056	32	17	8	27.5	0.8	5.3	112	336	19.7	18	2000
PPH683K162G20	0.068	26	19	10	22.5	0.8	6.4	204	612	13.9	16	3000
PPH683K162H11	0.068	32	18	9	27.5	0.8	5.4	136	408	16.2	18	2000
PPH823K162G20	0.082	26	19	10	22.5	0.8	6.6	246	738	13.2	16	3000
PPH823K162H20	0.082	32	20	11	27.5	0.8	6.4	164	492	13.5	18	2000
PPH823K162N20	0.082	42	22	11	37.5	1.0	6	98	295	18.5	20	1200
PPH104K162G21	0.10	26	20	11	22.5	0.8	7.4	300	900	10.8	16	3000
PPH104K162H21	0.10	32	22	13	27.5	0.8	7.4	200	600	11	18	2000
PPH104K162N20	0.10	42	22	11	37.5	1.0	6.6	120	360	15.2	20	1200
PPH124K162H21	0.12	32	22	13	27.5	0.8	7.4	240	720	11	18	2000
PPH124K162N20	0.12	42	22	11	37.5	1.0	7.2	144	432	12.6	20	1200
PPH154K162H22	0.15	32	24.5	13	27.5	0.8	7.9	300	900	10.3	18	2000
PPH154K162N20	0.15	42	22	11	37.5	1.0	7	180	540	13.5	20	1200
PPH184K162H24	0.18	32	28	14	27.5	0.8	8.1	360	1080	11	18	2000
PPH184K162N21	0.18	42	24	13	37.5	1.0	7.2	216	648	14	20	1200
PPH224K162H28	0.22	32	33	18	27.5	0.8	9.1	440	1320	11	18	2000
PPH224K162N21	0.22	42	24	13	37.5	1.0	7.9	264	792	11.5	20	1200
PPH274K162H28	0.27	32	33	18	27.5	0.8	9.7	540	1620	9.8	18	2000
PPH274K162N21	0.27	42	24	13	37.5	1.0	8.8	324	972	9.4	20	1200
PPH334K162H28	0.33	32	33	18	27.5	0.8	9.9	660	1980	9.4	18	2000
PPH334K162N22	0.33	42	28.5	16	37.5	1.0	10.4	396	1188	9.2	20	1200
PPH394K162H30	0.39	32	37	22	27.5	1.0	10.7	780	2340	10.2	18	2000
PPH394K162N22	0.39	42	28.5	16	37.5	1.0	10.5	468	1404	9.1	20	1200
PPH474K162H30	0.47	32	37	22	27.5	1.0	11.7	940	2820	8.5	18	2000
PPH474K162N26	0.47	42	32	19	37.5	1.0	11.4	564	1692	8.6	20	1200
PPH564K162N30	0.56	42	40	20	37.5	1.0	12.6	672	2016	9	20	1200
PPH684K162N30	0.68	42	40	20	37.5	1.0	12.7	816	2448	8.9	20	1200
PPH824K162N32	0.82	42	44	24	37.5	1.0	13.8	984	2952	8.6	20	1200
PPH105K162N32	1.0	42	44	24	37.5	1.0	14.2	1200	3600	8.1	20	1200
PPH125K162N40	1.2	42	45	30	37.5	1.0	16.2	1440	4320	7.6	20	1200

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

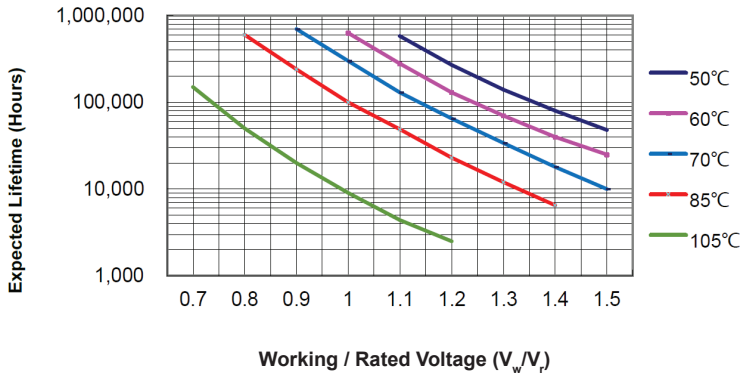
		Dimensions										
Part Number	Cap (µF)	L (mm)	H (mm)	T (mm)	P (mm)	Ød (mm)	Irms Max 70ºC, 100kHz (A)	Peak Current (A)	Surge Current (A)	ESR typ 100kHz (mΩ)	ESL (nH)	dV/dt (V/µs)
2000 Vdc (700 Vac)												
PPH102K202E10	0.0010	18	11	5	15	0.8	0.7	10	29	654.1	10	9500
PPH102K202G10	0.0010	26	15.5	6	22.5	0.8	0.5	5	14	1622.1	16	4500
PPH122K202E10	0.0012	18	11	5	15	0.8	0.8	11	34	546.1	10	9500
PPH122K202G10	0.0012	26	15.5	6	22.5	0.8	0.6	5	16	1354.4	16	4500
PPH152K202E10	0.0015	18	11	5	15	0.8	0.9	14	43	436	10	9500
PPH152K202G10	0.0015	26	15.5	6	22.5	0.8	0.7	7	20	1081.4	16	4500
PPH182K202E10	0.0018	18	11	5	15	0.8	1	17	51	364.1	10	9500
PPH182K202G10	0.0018	26	15.5	6	22.5	0.8	0.9	8	24	603.9	16	4500
PPH222K202E10	0.0022	18	11	5	15	0.8	1.1	21	63	297.6	10	9500
PPH222K202G10	0.0022	26	15.5	6	22.5	0.8	1	10	30	492.1	16	4500
PPH272K202E10	0.0027	18	11	5	15	0.8	1.2	26	77	242.5	10	9500
PPH272K202G10	0.0027	26	15.5	6	22.5	0.8	1.2	12	36	334.1	16	4500
PPH332K202E10	0.0033	18	11	5	15	0.8	1.3	31	94	198.1	10	9500
PPH332K202G10	0.0033	26	15.5	6	22.5	0.8	1.3	15	45	272.9	16	4500
PPH392K202E10	0.0039	18	11	5	15	0.8	1.4	37	111	167.7	10	9500
PPH392K202G10	0.0039	26	15.5	6	22.5	0.8	1.5	18	53	208.2	16	4500
PPH472K202E10	0.0047	18	11	5	15	0.8	1.5	45	134	139.1	10	9500
PPH472K202G10	0.0047	26	15.5	6	22.5	0.8	1.6	21	63	172.6	16	4500
PPH562K202E11	0.0056	18	12	6	15	0.8	1.8	53	160	116.7	10	9500
PPH562K202G10	0.0056	26	15.5	6	22.5	0.8	1.8	25	76	144.7	16	4500
PPH682K202E11	0.0068	18	12	6	15	0.8	1.9	65	194	96.2	10	9500
PPH682K202G10	0.0068	26	15.5	6	22.5	0.8	2	31	92	119.2	16	4500
PPH822K202E11	0.0082	18	12	6	15	0.8	2.1	78	234	79.7	10	9500
PPH822K202G10	0.0082	26	15.5	6	22.5	0.8	2.2	37	111	98.9	16	4500
PPH103K202E13	0.010	18	13.5	7.5	15	0.8	2.4	95	285	65.4	10	9500
PPH103K202G10	0.010	26	15.5	6	22.5	0.8	2.4	45	135	81.1	16	4500
PPH123K202E14	0.012	18	14.5	8.5	15	0.8	3.5	114	342	32.7	10	9500
PPH123K202G10	0.012	26	15.5	6	22.5	0.8	2.6	54	162	67.5	16	4500
PPH153K202E14	0.015	18	14.5	8.5	15	0.8	4	143	428	26.1	10	9500
PPH153K202G10	0.015	26	15.5	6	22.5	0.8	2.9	68	203	54	16	4500
PPH183K202E20	0.018	18	16	10	15	0.8	4.5	171	513	21.8	10	9500
PPH183K202G10	0.018	26	15.5	6	22.5	0.8	3.2	81	243	45	16	4500
PPH223K202G11	0.022	26	16.5	7	22.5	0.8	3.6	99	297	36.8	16	4500
PPH223K202H10	0.022	32	17	8	27.5	0.8	3.7	55	165	40.2	18	2500
PPH273K202G11	0.027	26	16.5	7	22.5	0.8	4	122	365	30	16	4500
PPH273K202H10	0.027	32	17	8	27.5	0.8	4.1	68	203	32.7	18	2500
PPH333K202G12	0.033	26	17	8.5	22.5	0.8	4.5	149	446	24.6	16	4500
PPH333K202H11	0.033	32	18	9	27.5	0.8	4.2	83	248	26.8	18	2500
PPH333K202N20	0.033	42	22	11	37.5	1.0	4.6	50	149	30.6	20	1500
PPH393K202G20	0.039	26	19	10	22.5	0.8	5.2	176	527	20.8	16	4500

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

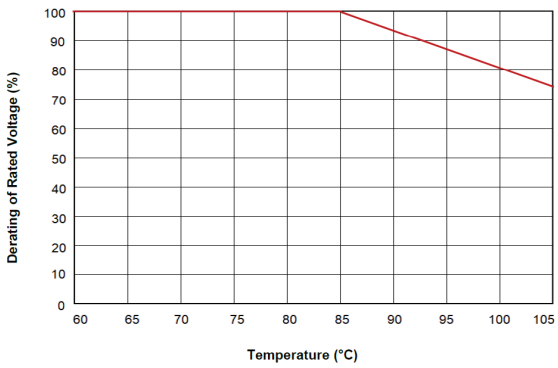
		Dimensions										
Part Number	Cap (µF)	L (mm)	H (mm)	T (mm)	P (mm)	Ød (mm)	Irms Max 70ºC, 100kHz (A)	Peak Current (A)	Surge Current (A)	ESR typ 100kHz (mΩ)	ESL (nH)	dV/dt (V/µs)
2000 Vdc (700 Vac)												
PPH393K202H20	0.039	32	20	11	27.5	0.8	5	98	293	22.7	18	2500
PPH393K202N20	0.039	42	22	11	37.5	1.0	5	59	176	25.9	20	1500
PPH473K202G20	0.047	26	19	10	22.5	0.8	5.8	212	635	17.2	16	4500
PPH473K202H20	0.047	32	20	11	27.5	0.8	5.5	118	353	18.8	18	2500
PPH473K202N20	0.047	42	22	11	37.5	1.0	5.5	71	212	21.5	20	1500
PPH563K202G21	0.056	26	20	11	22.5	0.8	6.1	252	756	16.1	16	4500
PPH563K202H21	0.056	32	22	13	27.5	0.8	5.7	140	420	18.4	18	2500
PPH563K202N20	0.056	42	22	11	37.5	1.0	6	84	252	18.1	20	1500
PPH683K202H21	0.068	32	22	13	27.5	0.8	5.9	170	510	17.2	18	2500
PPH683K202N20	0.068	42	22	11	37.5	1.0	6.7	102	306	14.9	20	1500
PPH823K202H22	0.082	32	24.5	13	27.5	0.8	6.3	205	615	16.2	18	2500
PPH823K202N20	0.082	42	22	11	37.5	1.0	7.3	123	369	12.3	20	1500
PPH104K202H24	0.10	32	28	14	27.5	0.8	7.4	250	750	13.3	18	2500
PPH104K202N21	0.10	42	24	13	37.5	1.0	7.3	150	450	13.5	20	1500
PPH124K202H28	0.12	32	33	18	27.5	0.8	7.9	300	900	14.7	18	2500
PPH124K202N21	0.12	42	24	13	37.5	1.0	7.2	180	540	14	20	1500
PPH154K202H28	0.15	32	33	18	27.5	0.8	8.2	375	1125	13.7	18	2500
PPH154K202N22	0.15	42	28.5	16	37.5	1.0	8	225	675	15.7	20	1500
PPH184K202H30	0.18	32	37	22	27.5	1.0	8.9	450	1350	14.7	18	2500
PPH184K202N22	0.18	42	28.5	16	37.5	1.0	8.2	270	810	15	20	1500
PPH224K202H30	0.22	32	37	22	27.5	1	9.3	550	1650	13.4	18	2500
PPH224K202N26	0.22	42	32	19	37.5	1	9	330	990	13.8	20	1500
PPH274K202N30	0.27	42	40	20	37.5	1	10.7	405	1215	12.5	20	1500
PPH334K202N30	0.33	42	40	20	37.5	1	10.8	495	1485	12.3	20	1500
PPH394K202N32	0.39	42	44	24	37.5	1	12.6	585	1755	10.4	20	1500
PPH474K202N32	0.47	42	44	24	37.5	1	13.8	705	2115	8.6	20	1500
PPH564K202N40	0.56	42	45	30	37.5	1	14.4	840	2520	9.6	20	1500
PPH684K202N40	0.68	42	45	30	37.5	1	14.9	1020	3060	9.9	20	1500

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

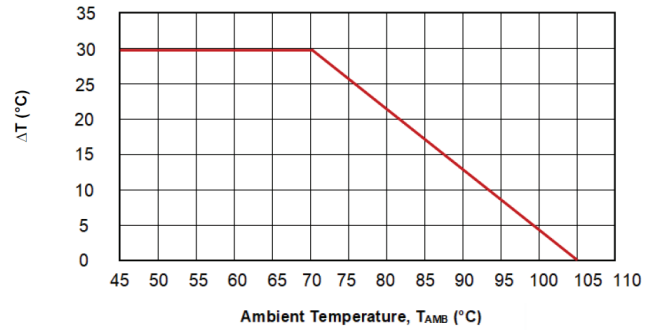
Expected Life Curve



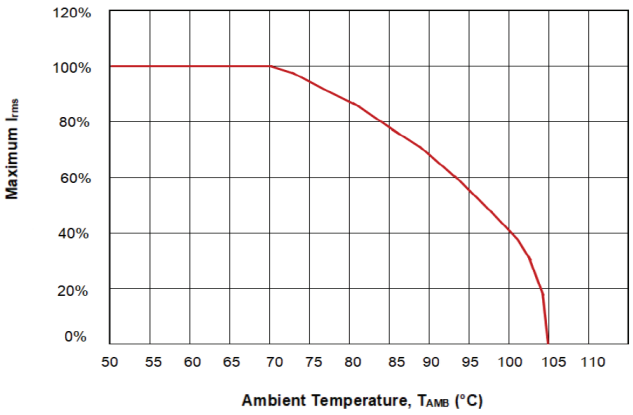
Derating of Rated Voltage Vs Ambient Temperature (T_{AMB})



Maximum Over-Temperature (ΔT) Vs Ambient Temperature (T_{AMB})



Maximum I_{rms} Vs Ambient Temperature (T_{AMB})



T_{HS} = Highest hot spot temperature in the capacitor

T_{AMB} = Highest ambient temperature surrounding the capacitor

85°C / 85% RH , 2000h @ Vr, AEC-Q200 Qualified

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