

Type 944PC Polypropylene, DC Link Capacitors

High Current, Low Profile for Inverter Applications



Type 944PC is specifically designed for use in high power DC filtering applications. The low inductance internal construction utilizes low loss metallized polypropylene for high ripple current capability. Male or female terminal options offer design flexibility in a rugged UL 94V0 rated flame retardant plastic case and resin fill. High current ratings and robust mounting flanges make the 944PC suited for inverter applications in electric vehicle power inverters, wind power inverters and motor drives.

Highlights

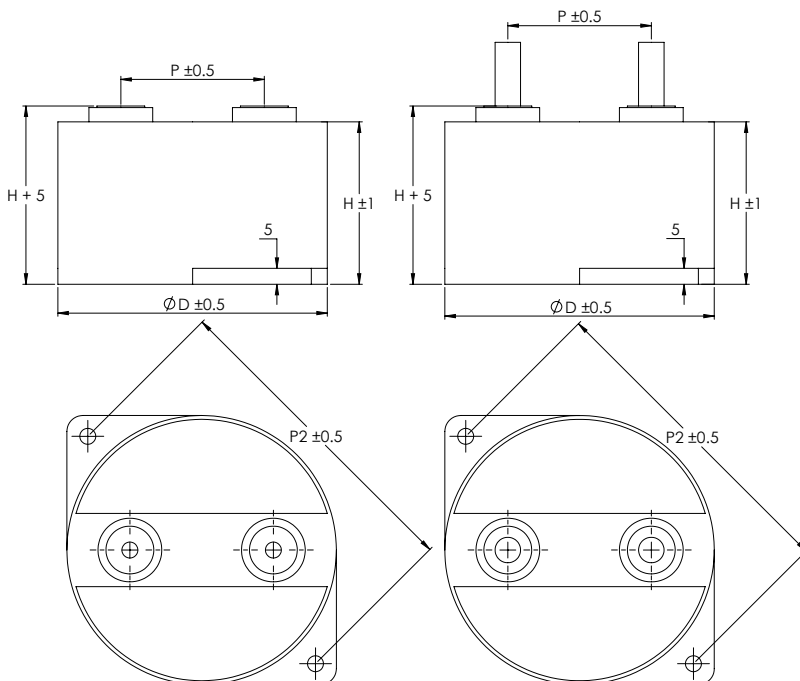
- Low Inductance
- Low Profile
- Low ESR
- High Ripple Current
- High Voltage Ratings

Specifications

Capacitance Range	60 - 750 μ F
Capacitance Tolerance	$\pm 5\%$ (J) $\pm 10\%$ (K)
Rated Voltage	450 Vdc - 1100 Vdc
Operating Temperature Range	-40 °C to 105 °C
Dissipation Factor	≤ 0.002 (0.2%) @ 100 Hz @ 20 °C
Test Voltage between Terminal @ 25°C	1.5 x rated voltage for 60s (terminal to terminal)
Test Voltage between Terminals & Case @ 25°C	3 kVAC 50/60 Hz for 10s @ 25 °C
Insulation Resistance	$IR \times C \geq 10,000 \text{ M}\Omega \times \mu\text{F}$ @ 100 VDC 20 °C
Reference Standards	IEC 61071
RoHS Compliant	

Dimensions

Construction Details	
Case Material	Plastic UL94V-0
Resin Material	Dry Resin UL94V-0
Terminal Material	Tinned Copper Insert / Stud



DIMENSION - Case (mm)

Case Code	D (± 0.5)	H (± 1)	P (± 0.5)	P2 (± 0.5)	F Terminal	M Terminal
A	84.5	40	45	101	M5 x 7	M8 x 20
B	84.5	51	45	101	M5 x 7	M8 x 20
C	84.5	65	45	101	M5 x 7	M8 x 20
D	115	65	60	133	M8 x 10	M8 x 20

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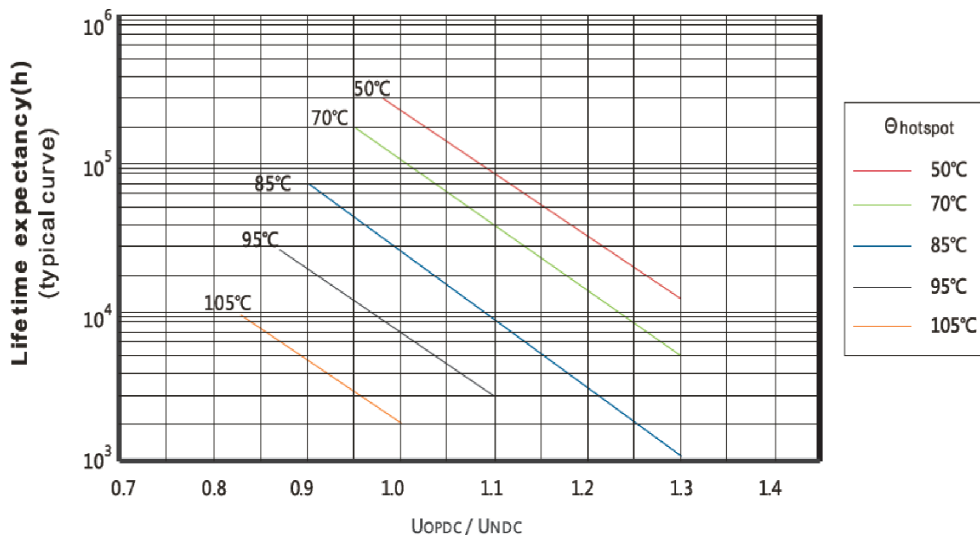
Part Numbering System

944PC Series	117 Capacitance	K Tolerance	601 Voltage	A Case Code	1 Internal Code	M Leads
944PC	EIA Cap Code 756 = 75 μ F 107 = 100 μ F 327 = 320 μ F	K = \pm 10% Standard J = \pm 5% On request	451 = 450 VDC 601 = 600 VDC 801 = 800 VDC 112 = 1100 VDC	See table	Internal	M = Male Terminals F = Female Terminals

Ratings

CDE Part Number	Volt	Cap	ESR	Rth	Irms	dV/dt	Ip	D	H	ESL	Weight
944PC187K451A1_	450	180	0.7	6	85	12	2160	84.5	40	25	0.35
944PC287K451B1_	450	280	0.8	5	85	10	2800	84.5	50	32	0.4
944PC337K451C1_	450	330	0.7	4.8	95	9	2970	84.5	65	40	0.5
944PC387K451C1_	450	380	1	4.8	80	8	3040	84.5	65	40	0.5
944PC707K451D1_	450	700	0.8	3.7	95	5	3500	115	65	40	0.9
944PC117K601A1_	600	110	0.8	6	82	20	2200	84.5	40	25	0.35
944PC187K601B1_	600	180	0.9	5	85	13	2340	84.5	50	32	0.4
944PC227K601C1_	600	220	0.7	4.8	95	11	2420	84.5	65	40	0.5
944PC287K601C1_	600	280	1	4.8	80	9	2520	84.5	65	40	0.5
944PC477K601D1_	600	470	0.9	3.7	95	8	3760	115	65	40	0.9
944PC756K801A1_	800	75	1	6	72	25	1875	84.5	40	25	0.35
944PC127K801B1_	800	120	0.9	5	82	19	2280	84.5	50	32	0.4
944PC147K801C1_	800	140	0.8	4.8	90	18	2520	84.5	65	40	0.5
944PC147K801C2_	800	140	1.1	4.8	75	18	2520	84.5	65	40	0.5
944PC227K801C1_	800	220	1.1	4.8	75	11	2420	84.5	65	40	0.5
944PC327K801D1_	800	320	0.9	3.7	90	12	3840	115	65	40	0.9
944PC606K112A1_	1100	60	1.5	6	58	30	1800	84.5	40	25	0.35
944PC906K112B1_	1100	90	1.5	5	64	25	2250	84.5	50	32	0.4
944PC127K112C1_	1100	120	1	4.8	78	20	2400	84.5	65	40	0.5
944PC147K112C1_	1100	140	1.5	4.8	65	18	2520	84.5	65	40	0.5
944PC247K112D1_	1100	240	1.2	3.7	82	14	3360	115	65	40	0.9

Lifetime Expectancy Typical Curves



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