

METALIZED-FILM ENERGY STORAGE CAPACITORS



FEATURES

- Half the size and a third the weight of conventional paper energy storage capacitors
- High energy (up to 1,600 Joules)
- High current (up to 3,000 Amps)
- Rectangular metal case construction

MAJOR APPLICATIONS:

Lasers, beacons, flash, and other applications requiring small, lightweight energy storage capacitors. These capacitors are designed to discharge into lamp loads at 1 pps or less at ambient temperatures up to 40°C.

PHYSICAL CHARACTERISTICS

CONSTRUCTION:

Non-inductive wound metalized film, wax impregnated.

CASE:

Hermetically sealed, drawn or welded, rectangular cases, for maximum durability.

MARKING:

Dearborn trademark, type or catalog number, capacitance, tolerance and voltage.

SPECIAL REQUIREMENTS:

The operational characteristics as stated are typical of standard capacitors. Special designs to meet additional or different requirements are available. Consult factory for additional information.

ELECTRICAL SPECIFICATIONS

CAPACITANCE RANGE:

10 μ F to 200 μ F

CAPACITANCE TOLERANCE:

+20% -10%, $\pm 10\%$

OPERATING TEMPERATURE:

0°C to +40°C

DC VOLTAGE RANGE:

2,000 VDC to 4,000 VDC

DISSIPATION FACTOR:

1.0% maximum

VOLTAGE TEST:

120% of rated voltage for 2 minutes

DISCHARGE RATE:

1 discharge per sec. maximum

INDUCTANCE:

The typical inductance at the resonant frequency is 0.1 μ H

INSULATION RESISTANCE:

Measured at 500 VDC after a 2 minute charge.

- At +25°C, 2,000 Megaohm-Microfarads

DIMENSIONS (in inches)

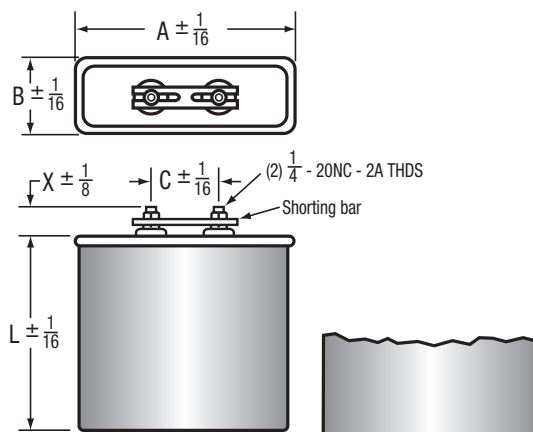


FIGURE 1
DRAWN CASE

FIGURE 1A
WELDED CASE

METALIZED-FILM ENERGY STORAGE CAPACITORS

TYPE 282P

STANDARD RATINGS

μF	Rated Joules	Catalog Number	Figure Number	Dimensions (in inches)					Energy Density (in Joules / in³)	Approx. Weight (in lbs)
				A	B	C	L	X		
2,000 VDC										
50	100	282P1	1	3.75	2.5	2	5.875	0.625	1.84	2.6
80	160	282P2	1	4.5625	3.75	2	5.125	0.625	1.83	4.1
100	200	282P3	1	4.5625	3.75	2	6.25	0.625	1.87	5.0
200	400	282P4	1A	8	4.125	4.625	6.5	0.5	1.87	10.5
2,500 VDC										
10	31	282P5	1	3.75	2.25	2	3.375	0.625	1.0	1.5
20	62	282P6	1	3.75	2.25	2	4.75	0.625	1.55	1.9
50	156	282P7	1	4.5625	3.75	2	5.125	0.625	1.78	4.1
80	250	282P8	1	4.5625	3.75	2	6.75	0.625	2.18	5.4
100	312	282P9	1A	8	4.125	4.625	5.125	0.5	1.85	8.3
200	625	282P10	1A	8	4.125	4.625	8.75	0.5	2.17	14.2
4,000 VDC										
25	200	282P11	1	4.5625	3.75	2	6.25	0.625	1.87	5.0
35	280	282P12	1	4.5625	3.75	2	7.75	0.625	2.12	6.3
50	400	282P13	1A	8	4.125	4.625	6.5	0.5	1.87	10.5
100	800	282P14	1A	8	4.125	4.625	10.25	0.5	2.37	16.5
200	1600	282P15	1A	13.5	5.25	6.75	10.375	0.5	2.18	34.5

Additional capacitance values, voltages, and tolerances are available upon request.