

WRAP AND FILL SMALL SIZE POLYPHENYLENE SULFIDE DIELECTRIC FILM / FOIL CONSTRUCTION

TYPE 810P



FEATURES

- Extended foil construction
- + 125°C rated
- Replacement for 610P polycarbonate capacitors
- Moisture resistant
- Low dissipation factor

MAJOR APPLICATIONS:

Oscillator, timing, coupling and decoupling at high frequency, filter circuits.

PHYSICAL CHARACTERISTICS

CONSTRUCTION:

Non-inductive wound polyphenylene sulfide film and extended foil.

CASE:

Flame retardant tape wrap and epoxy endfill.

LEAD MATERIAL:

Solder coated solid wire.

LEAD WIRE SIZES:

Case Dia.	Lead AWG
≤ 0.327	0.025 (No. 22)
> 0.327	0.032 (No. 20)

LEAD STRENGTH:

Capable of withstanding a five pound pull force on lead axis.

MARKING:

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

ELECTRICAL SPECIFICATIONS

CAPACITANCE RANGE: 0.001 μ F to 1.0 μ F

DC VOLTAGE RATING: 50 VDC to 400 VDC

CAPACITANCE TOLERANCE: \pm 20%, \pm 10%, \pm 5%

OPERATING TEMPERATURE: -55°C to +125°C

VOLTAGE DERATING: At +125°C, 50% of the +85°C rating

DISSIPATION FACTOR:

0.15% maximum when measured at 1kHz @ 25°C

VOLTAGE TEST: 200% of rated voltage for 1 minute

INSULATION RESISTANCE:

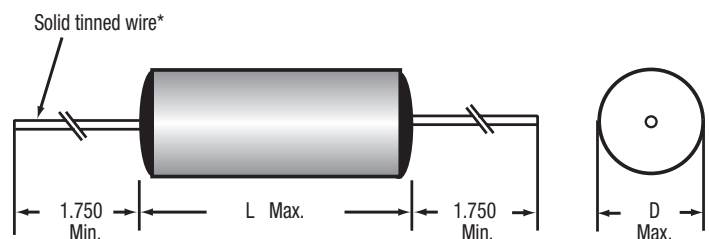
Measured at rated VDC after a 2 minute charge.

- At +25°C, 50,000 Megaohm-Microfarads, need not exceed 100,000 Megaohms
- At +85°C, 2,000 Megaohm-Microfarads, need not exceed 4,000 Megaohms
- At +125°C, 250 Megaohm-Microfarads, need not exceed 500 Megaohms

MAXIMUM PULSE RISE TIME

Capacitor Length (inch)	Rise Time dv / dt (V / μ s)			
	50 V	100 V	200 V	400 V
0.560	3200	3700	4400	6000
0.625	1300	-	-	3617
0.750	630	1200	1727	2900
1.000	-	680	1147	1636
1.062	470	-	1100	1500
1.250	440	-	-	1100
1.312	-	727	-	1000
1.562	-	433	-	900
1.812	270	368	578	-
2.062	-	-	442	612
2.312	-	300	-	-
2.562	-	-	-	491

DIMENSIONS (in inches)



* Leads to be within \pm 0.062" of center line at egress, but not less than 0.031" from edge.

WRAP AND FILL SMALL SIZE POLYPHENYLENE SULFIDE DIELECTRIC FILM / FOIL CONSTRUCTION

STANDARD RATINGS

Capacitance		Voltage Code 050 50 VDC		Voltage Code 100 100 VDC		Voltage Code 200 200 VDC		Voltage Code 400 400 VDC	
μF	Code	D	L	D	L	D	L	D	L
0.0010	102	0.260	0.560	0.260	0.560	0.260	0.560	0.260	0.560
0.0015	152	0.260	0.560	0.260	0.560	0.260	0.560	0.260	0.560
0.0022	222	0.260	0.560	0.260	0.560	0.260	0.560	0.327	0.560
0.0033	332	0.260	0.560	0.260	0.560	0.260	0.560	0.327	0.560
0.0047	472	0.327	0.560	0.327	0.560	0.327	0.560	0.312	0.625
0.0068	682	0.327	0.560	0.327	0.560	0.327	0.560	0.312	0.750
0.010	103	0.235	0.625	0.340	0.560	0.312	0.750	0.400	0.750
0.015	153	0.235	0.625	0.312	0.750	0.312	0.750	0.400	1.000
0.022	223	0.235	0.750	0.312	0.750	0.400	0.750	0.400	1.250
0.033	333	0.312	0.750	0.312	0.750	0.400	1.000	0.500	1.000
0.047	473	0.312	0.750	0.400	0.750	0.400	1.000	0.562	1.062
0.068	683	0.400	0.750	0.400	1.000	0.500	1.000	0.562	1.312
0.10	104	0.400	0.750	0.400	1.000	0.562	1.062	0.670	1.562
0.15	154	0.400	1.250	0.562	1.312	0.562	1.812	0.750	2.062
0.22	224	0.562	1.062	0.562	1.562	0.670	1.812	0.750	2.562
0.33	334	0.562	1.062	0.670	1.562	0.750	2.062	1.000	2.062
0.47	474	0.562	1.812	0.750	1.812	1.000	1.812	1.000	2.562
0.68	684	0.562	1.812	0.750	2.312	-	-	-	-
1.00	105	0.750	1.812	1.000	1.812	-	-	-	-

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