

# PAPER / POLYESTER DIELECTRIC EXTENDED FOIL ELECTRODES



## FEATURES

- Moderate cost
- Small size
- High peak current ratings
- High corona starting voltage
- Approved to MIL-PRF-19978

### MAJOR APPLICATIONS:

High voltage, high current, high pulse operations, protection circuits, and snubber applications.

## PHYSICAL CHARACTERISTICS

### CONSTRUCTION:

Non-inductive wound paper / polyester dielectric with extended foil electrodes. Impregnated with vitamin Q.

### CASE:

Hermetically sealed metal enclosure. Styles and dimensions are in Guide to Ordering section in the front of the catalog.

### LEAD MATERIAL:

Solder coated solid wire.

### LEAD WIRE SIZES:

| Case Dia.         | Lead AWG |
|-------------------|----------|
| < 0.235           | No. 24   |
| < 0.235 and 0.312 | No. 22   |
| 0.400 and over    | No. 20   |

### LEAD PULL:

5 lbs (2.3 kg) for one minute. No physical damage.

### LEAD BEND:

After three complete consecutive bends. No damage.

### MARKING:

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

## ELECTRICAL SPECIFICATIONS

### CAPACITANCE RANGE:

0.001  $\mu$ F to 1.0  $\mu$ F

### VOLTAGE RATING:

100 VDC to 1,000 VDC

### CAPACITANCE TOLERANCE:

$\pm 20\%$ ,  $\pm 10\%$ ,  $\pm 5\%$

### OPERATING TEMPERATURE:

-65°C to +125°C

### VOLTAGE DERATING:

At +125°C, 50% of the 85°C rating

### DISSIPATION FACTOR:

1.0% maximum

### DC VOLTAGE TEST:

200% of rated voltage for 2 minutes

### INSULATION RESISTANCE:

Measure at rated VDC or 500 V, whichever is less, after a 2 minute charge.

- At +25°C, 20,000 Megaohm-Microfarads, need not exceed 30,000 Megaohms
- At +125°C, 20 Megaohm-Microfarads, need not exceed 250 Megaohms

## MAXIMUM PULSE RISE TIME

| Capacitor<br>Length (inch) | Rise Time dv / dt (V / $\mu$ s) |         |         |         |         |           |
|----------------------------|---------------------------------|---------|---------|---------|---------|-----------|
|                            | 100 VDC                         | 200 VDC | 300 VDC | 400 VDC | 600 VDC | 1,000 VDC |
| 0.687 / 0.750              | 800                             | 1600    | 2000    | 3000    | 4500    | -         |
| 0.812 / 0.875              | 700                             | 1000    | 1000    | 1000    | 1500    | 2500      |
| 1.062 / 1.125              | 400                             | 500     | 650     | 800     | 1000    | 1500      |
| 1.312 / 1.375              | 300                             | 350     | 425     | 500     | 800     | 1000      |
| 1.562 / 1.625              | 200                             | 250     | 300     | 350     | 500     | 800       |
| 1.812 / 1.875              | -                               | -       | -       | -       | -       | 550       |
| 2.062 / 2.125              | -                               | 200     | 250     | 300     | 400     | 500       |
| 2.312 / 2.375              | -                               | -       | -       | -       | 300     | 450       |

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TYPE 132P

## STANDARD RATINGS

| Capacitance |      | Voltage Code 100<br>100 VDC |       | Voltage Code 200<br>200 VDC |       | Voltage Code 300<br>300 VDC |       | Voltage Code 400<br>400 VDC |       | Voltage Code 600<br>600 VDC |       | Voltage Code 1000<br>1,000 VDC |       |
|-------------|------|-----------------------------|-------|-----------------------------|-------|-----------------------------|-------|-----------------------------|-------|-----------------------------|-------|--------------------------------|-------|
| µF          | Code | D                           | L     | D                           | L     | D                           | L     | D                           | L     | D                           | L     | D                              | L     |
| 0.0010      | 102  | 0.175                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.400                          | 0.812 |
| 0.0015      | 152  | 0.175                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.400                          | 0.812 |
| 0.0022      | 222  | 0.175                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.400                          | 0.812 |
| 0.0033      | 332  | 0.175                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.312                       | 0.812 | 0.400                          | 0.812 |
| 0.0047      | 472  | 0.175                       | 0.687 | 0.235                       | 0.687 | 0.235                       | 0.687 | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.400                          | 0.812 |
| 0.0068      | 682  | 0.195                       | 0.687 | 0.235                       | 0.687 | 0.312                       | 0.812 | 0.195                       | 0.812 | 0.312                       | 0.812 | 0.400                          | 0.812 |
| 0.010       | 103  | 0.235                       | 0.687 | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.400                          | 0.812 |
| 0.015       | 153  | 0.235                       | 0.687 | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.400                       | 0.812 | 0.400                          | 1.062 |
| 0.022       | 223  | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.400                       | 0.812 | 0.400                       | 0.812 | 0.400                          | 1.312 |
| 0.033       | 333  | 0.312                       | 0.812 | 0.312                       | 0.812 | 0.400                       | 0.812 | 0.400                       | 0.812 | 0.400                       | 1.062 | 0.562                          | 1.062 |
| 0.047       | 473  | 0.312                       | 0.812 | 0.400                       | 0.812 | 0.400                       | 0.812 | 0.400                       | 1.062 | 0.400                       | 1.312 | 0.562                          | 1.312 |
| 0.068       | 683  | 0.400                       | 0.812 | 0.400                       | 0.812 | 0.400                       | 1.062 | 0.400                       | 1.312 | 0.562                       | 1.062 | 0.562                          | 1.562 |
| 0.10        | 104  | 0.400                       | 0.812 | 0.400                       | 1.062 | 0.400                       | 1.312 | 0.562                       | 1.062 | 0.562                       | 1.312 | 0.670                          | 1.562 |
| 0.15        | 154  | 0.400                       | 1.062 | 0.400                       | 1.312 | 0.562                       | 1.062 | 0.562                       | 1.312 | 0.562                       | 1.562 | 0.670                          | 1.812 |
| 0.22        | 224  | 0.400                       | 1.062 | 0.562                       | 1.062 | 0.562                       | 1.312 | 0.562                       | 1.562 | 0.670                       | 1.562 | 0.750                          | 2.062 |
| 0.33        | 334  | 0.562                       | 1.062 | 0.562                       | 1.312 | 0.562                       | 1.562 | 0.670                       | 1.562 | 0.750                       | 2.062 | 1.000                          | 2.062 |
| 0.47        | 474  | 0.562                       | 1.312 | 0.562                       | 1.562 | 0.670                       | 1.562 | 0.750                       | 2.062 | 0.750                       | 2.312 | 1.000                          | 2.312 |
| 0.68        | 684  | 0.562                       | 1.562 | 0.670                       | 1.562 | 0.750                       | 2.062 | -                           | -     | -                           | -     | -                              | -     |
| 1.00        | 105  | 0.670                       | 1.562 | 0.750                       | 2.062 | -                           | -     | -                           | -     | -                           | -     | -                              | -     |

Additional capacitance values, voltages, and tolerances are available upon request.  
\* The dimensions Tabulated above are for styles 01, 03, and 12. Add 0.062" to the length for styles 02, 04, and 13.