SERIES ZD

Metallized Polyester (Mylar*) Capacitors
Performance Characteristics

General Data

CONSTRUCTION: Extended foil (non-inductive).

CONFIGURATION: Available in the following: A, oval wrap and fill; B, tubular wrap and fill; X, axial lead epoxy case; R, radial lead epoxy case; L, tubular hermetically sealed case; and G, rectangular hermetically sealed case.

LEADS: "Copperweld" (steel coated with 30% copper by wt. and tin-plated with 60-40 Sn-Pb) leads are standard.

Performance Data

1. Capacitance
Capacitance shall be measured at or referred to 1000±20 Hz at 25±5 degrees C for capacitance values up to and including 1.0 MFD. Capacitance values greater than 1.0 MFD measured at 60±6 Hz.

2. Available Capacitance Tolerances
Standard Capacitance Tolerance is ±20%. For other tolerances a designation must be added to the end of the part number. Tolerance designators are: ±10% K, ±5% J, ±3% H, ±2% G and ±1% F.

3. Capacity Variation
Typical capacitance variation is shown on performance chart.

4. Dissipation Factor
Dissipation factor shall be measured as described for capacitance, and shall not exceed 1.0%.

5. Insulation Resistance
Insulation resistance shall be measured at rated voltage or 100V, whichever is less, after 2 minutes electrification. Minimum values shall be:

Temperature	+25 deg. C	+85 deg. C	+125 deg. C
Megohms X Microfarads	10,000	100	10
Need not Exceed (Megohms)	40,000	1,000	100

6. Dielectric Strength
Capacitors shall withstand specified dc test potential for 60 seconds through a limiting resistance of 100 ohms/volts.

Terminal to terminal—150% of dc rating.

Terminal to case—200% of dc rating.

7. Operating Temperature Range
These capacitors are designed to operate over the temperature range from —55°C to +125°C. Derate linearly from 85°C to 50% at 125°C.

8. Moisture Resistance
Capacitors will meet or exceed the requirements of MIL-STD-202, Method 103, Condition B, with 100 volts or rated voltage applied, whichever is less.

9. Life Test
Will withstand 140% of rated voltage for 250 hours at +125 deg. C.

10. Lead Pull Test
The leads on these capacitors will withstand a steady axially applied pull of 5 lbs. for one minute.

11. Vibration
Capacitors will meet or exceed the requirements of MIL-STD-202, Method 204.

PART NUMBERING KEY

ZD | 1 | X | 104 | K

SERIES

ZD: Metallized Polyester (Mylar*)
MD: Polyester (Mylar) & Foil
Z: Miniature Metallized Polyester (Mylar)
B: Metallized Polycarbonate
K: Polycarbonate & Foil
C: Miniature Metallized Polycarbonate
HS: Highly Stable Metallized Polycarbonate
PD: Polystyrene & Foil
S: Metallized Polysulfone
P: Metallized Polypropylene
CQ: High voltage

VOLTAGE RATING (volts)

5 = 50
1 = 100
2 = 200
4 = 400
6 = 600
10 = 1000
20 = 2000
30 = 3000
50 = 5000
60 = 6000
100 = 10000

STYLE AND CIRCUIT

A - Oval Wrap & Fill
B - Tubular Wrap & Fill
X - Epoxy-Case Axial Leads
R - Epoxy-Case Radial Leads
L - Tubular Can (Herm. Sealed)
G - Rect. Can (Herm. Sealed)

CAPACITY

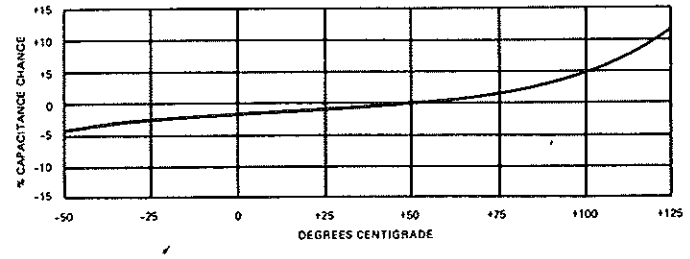
In Pico-farads. First two digits are significant figures; third is number of zeros to follow.

TOLERANCE

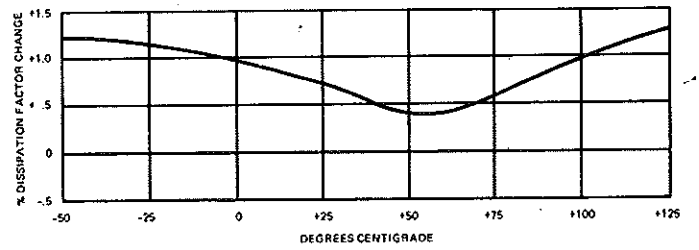
± 20% - M
± 10% - K
± 5% - J
± 3% - H
± 2% - G
± 1% - F

TEMPERATURE CHARACTERISTIC CURVES

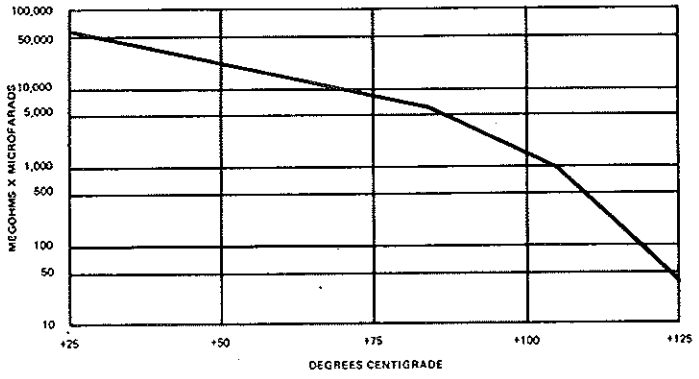
CAPACITANCE CHANGE VS. TEMPERATURE



DISSIPATION FACTOR VS. TEMPERATURE



INSULATION RESISTANCE VS. TEMPERATURE



ELPAC COMPONENTS ELPAC
3131 S. Standard Avenue, Santa Ana, CA 92705
Telephone (714) 979-4440. TWX 910-595-1513.