

**METALLIZED POLYCARBONATE FILM CAPACITORS
F141 INSTRUMENT CAPACITORS**

1. CAPACITANCE AND TOLERANCE: Capacitance shall be within the specified tolerance limits of the nominal rating. Capacitance shall be measured at or referred to measurements made at 1000 Hz.

2. DC VOLTAGE RATING: 50V, 75V, 100V, 150V, 200V, 300V, and 400V. (63V rating available on special order.)

3. OPERATING AND STORAGE TEMPERATURE: -55°C to +125°C.

4. CAPACITANCE CHANGE vs. TEMPERATURE: The capacitance change vs. temperature shall not exceed ±2% of the +25°C value over the temperature range of -55°C to +125°C.

5. DISSIPATION FACTOR: At 25°C, the dissipation factor of all capacitors shall not exceed 0.30%. Capacitors of 1 µF or less in capacitance shall be measured at or referred to measurements made at 1000 Hz. Capacitors greater than 1 µF shall be measured at or referred to measurements made at 100 Hz.

6. INSULATION RESISTANCE: At 25°C, the minimum product of insulation resistance and capacitance shall be 100,000 megohm-microfarads. Capacitance values of 0.5 µF or less need not exceed 200,000 megohms. The insulation resistance between the case and either terminal, where the case is not a terminal, shall be greater than 10,000 megohms.

At 85°C, the minimum product of insulation resistance and capacitance shall be 6000 megohms-microfarads. Capacitance values of .05 µF or less need not exceed 12,000 megohms.

At 125°C, the minimum product of insulation resistance and capacitance shall be 1000 megohm-microfarads. Capacitance values of 0.5 µF or less need not exceed 2000 megohms.

Measurements shall be made after a five (5) minute charge at rated DC voltage.

7. DIELECTRIC WITHSTANDING VOLTAGE: At 25°C capacitors shall withstand 200% of rated DC voltage for one (1) minute without permanent breakdown. When the case is not a terminal, the capacitors shall withstand 200% of rated DC voltage applied between the case and the terminals. Test voltage must be applied and discharged through a resistance of 1 ohm per volt, minimum.

8. LIFE TEST: When tested at 100°C, the capacitors shall withstand 140% of rated DC voltage for a period of 250 hours. Only one failure in 18 tested shall be permitted. Subsequent to testing, the capacitors shall meet the following requirements:

Insulation Resistance: At 25°C, no less than 60% of the initial value specified in INSULATION RESISTANCE.

Capacitance Change: Not more than 5% of the initial value obtained when measured as specified in CAPACITANCE AND TOLERANCE.

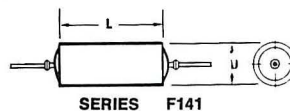
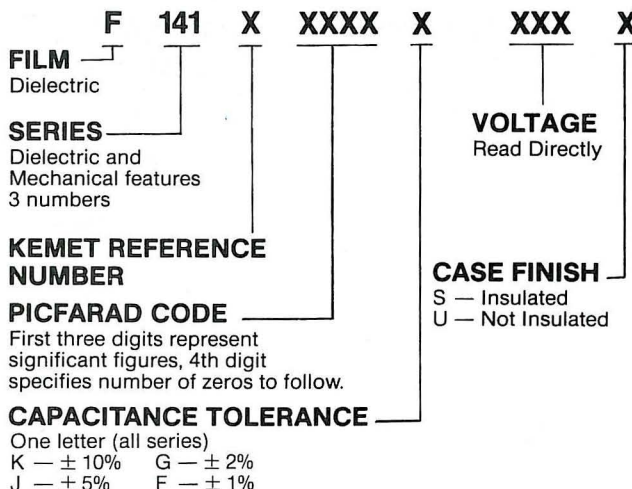
Dissipation Factor: Not greater than 0.60% when measured as specified in DISSIPATION FACTOR.

9. AC VOLTAGE RATING: (-55°C to +105°C Ambient)

DC VOLTAGE RATING	Equivalent VAC RMS Ratings at				
	400 Hz	800 Hz	1200 Hz	1600 Hz	2000 Hz
50 (0.047 µF thru 5.6 µF) (5.8 µF thru 12.0 µF) (15.0 µF thru 22.0 µF)	30 25 20	25 20 15	20 15 12	15 12 10	12 10 8
75 (0.01 µF thru 5.6 µF) (6.8 µF thru 12.0 µF) (15.0 µF thru 47.0 µF)	50 40 30	35 30 20	30 25 18	25 20 15	20 15 12
100 (0.01 µF thru 5.6 µF) (6.0 µF thru 12.0 µF) (15.0 µF thru 30.0 µF)	65 45 35	45 35 25	40 30 20	35 25 15	30 20 12
150 (0.01 µF thru 3.3 µF) (3.9 µF thru 5.6 µF) (6.8 µF thru 15.0 µF)	90 80 55	65 55 40	55 45 35	45 40 30	40 35 25
200 (0.10 µF thru 2.0 µF) (2.2 µF thru 5.6 µF) (6.0 µF thru 12.0 µF) (15.0 µF thru 39.0 µF)	120 95 65 50	95 75 45 30	80 65 35 20	70 55 30 15	60 50 25 12
300 (0.10 µF thru 1.5 µF) (1.8 µF thru 3.9 µF)	200 160	140 110	115 90	100 80	90 70
400 (0.10 µF thru 1.0 µF) (1.2 µF thru 2.7 µF)	240 190	170 135	140 110	120 95	110 90

METALLIZED POLYCARBONATE F141 SERIES

ORDERING INFORMATION



F141 MARKING INFORMATION

