



Upon request different lead length can be provided up to a minimum of 2.5mm.

GENERAL TECHNICAL DATA

- Dielectric:** metallized polypropylene film.
- Plates:** aluminium layer deposited by evaporation under vacuum.
- Winding:** non-inductive type.
- Leads:** tinned wire, low thermal conductivity.
- Protection:** plastic case, epoxy resin filled. Box material is solvent resistant and flame retardant according to UL94 V0.
- Marking:** series (1.04), capacitance, tolerance, DC rated voltage, manufacturing date code.
- Climatic category:** 55/085/56 IEC 60068-1
- Technical terms and test:** IEC 60384-16; DIN 45910 T23; CECC 31200

Rated Capacitance	63 Vdc			
	B max	H max	L max	p ± 0.3
5000 to 47000 pF	5.0	11.0	6.3	5.08

All dimensions are in mm.

ELECTRICAL CHARACTERISTICS

- Rated voltage (V_R):** 63 Vdc
- Category voltage (V_C):** up to +85°C V_C=V_R
- All dimensions are in mm.
- Capacitance values:** values in compliance with IEC 63 Norms and as E192 series.
- Capacitance tolerances:** ± 0.625% (P); ± 1% (F); ± 1.25% (A); ± 2% (G); ± 2.5% (H).
- Total self inductance:** max 1 nH per 1 mm lead and capacitor length.
- Temperature coefficient:** -(200 ± 80) ppm/°C
- Dissipation factor (DF):** tgδ at +25°C ± 5°C
- ≤ 30 × 10⁻⁴ at 100kHz
- Maximum pulse rise time (dv/dt)**

C (pF)	dv/dt (V/μs)	K ₀ (V ² /μs)
≤ 9000	50	6300
≤ 21000	40	5000
≤ 47000	10	1300

Insulation resistance:

- Test condition**
- Temperature: +25°C ± 5°C
- Voltage charge time: 1 min
- Voltage charge: 10Vdc
- Performance**
- ≥ 20 × 10⁴ MΩ

Test voltage between terminations:

1.6 × V_R applied for 2 s at +25°C ± 5°C

METALLIZED POLYPROPYLENE FILM CAPACITOR

Typical applications: timing, LC-filters, oscillator circuits, applications with high frequencies and high stability.

PRODUCT CODE: P04 (Loose) P14 (Taped)

TEST METHOD AND PERFORMANCE

Damp heat, steady state:

- Test conditions**
- Temperature: +40°C ± 2°C
- Relative humidity (RH): 93%
- Test duration: 56 days

Performance

- Capacitance change |ΔC/C|: ≤ 0.4%
- Insulation resistance: ≥ 5 × 10⁴ MΩ

Endurance:

- Test conditions**
- Temperature: +85°C ± 2°C
- Test duration: 2000 h
- Voltage applied: 1.5 × V_R

Performance

- Capacitance change |ΔC/C|: ≤ 0.5%
- The typical capacitance variation after 8000 hours is ± 0.6%.

Resistance to soldering heat:

- Test conditions**
- Solder bath temperature: +260°C ± 5°C
- Dipping time (with heat screen): 5 s ± 1 s

Performance

- Capacitance change |ΔC/C|: ≤ 0.2%

Thermal shock:

- Test conditions**
- Temperature: -40°C ... +85°C
- Cycles: nr. 5

Performance

- Capacitance change |ΔC/C|:
- ≤ (0.3% + 0.4 pF) for C ≤ 1000pF
- ≤ 0.2% for C > 1000pF

Long term stability:

- Test conditions**
- Temperature: +40°C ± 2°C
- Relative humidity (RH): 70% max
- Test duration: 2 years

Performance

- Capacitance change |ΔC/C|: ≤ (0.2% + 0.2pF)

RELIABILITY:

ZR
Z = 20 FIT
R = 10⁵ hours

1 FIT = 1 × 10⁻⁹ failures/comp. × h.