

3PH SERIES METALLIZED POLYPROPYLENE

Metallized Polypropylene Low Loss Dry Film Construction Capacitors

3 phase packaged wye or delta film capacitor. Engineered for demanding power quality and harmonic filtering applications utilizing high-reliability dry film capacitor technology. Designed for use in harmonic filters, low- and medium-voltage drives and power conversion equipment.



FEATURES

- Tight capacitance matching between phases (<1%)
- Minimizing inductance between phases
- Turnkey 3 phase filtering module
- Thermal cut-out option
- Capacitance to 300uF
- Dry construction
- RoHS Compliant
- UL Recognition Pending

STANDARD CONFIGURATION

- Wye (star) configuration
- Delta configuration

Specification Summary

Capacitance Range

16.6 μ F to 300.0 μ F

Capacitance Tolerance

Standard capacitance tolerance is $\pm 5\%$. Tolerance of $\pm 3\%$ is also available.

Operating Temperature Range

-55°C to +85°C

Enclosure/Construction

Polypropylene film in a polyester wrap with epoxy endfill. Terminals are tin plated copper.

Voltage Rating

VAC: 300VAC to 900VAC

VDC: 450VDC to 1300VDC

Quality Control

Capacitors are tested 100% for:

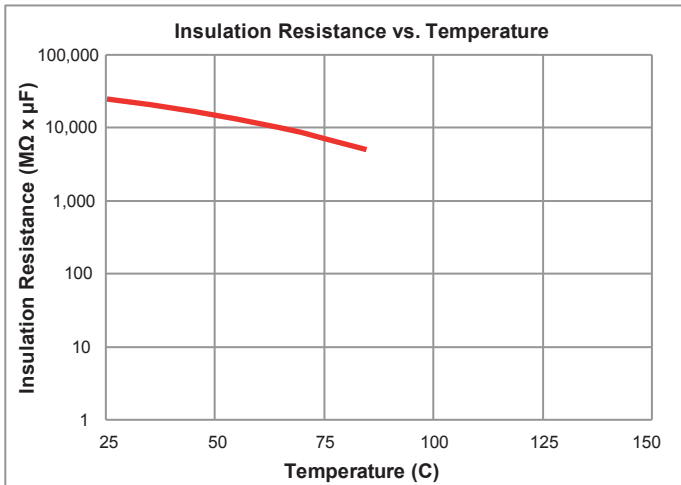
- Capacitance
- Tolerance
- Dissipation Factor
- Dielectric withstanding voltage
- Insulation Resistance
- Equivalent Series Resistance (ESR)

Process and inspection data are maintained on file and available upon special request.

Environmental

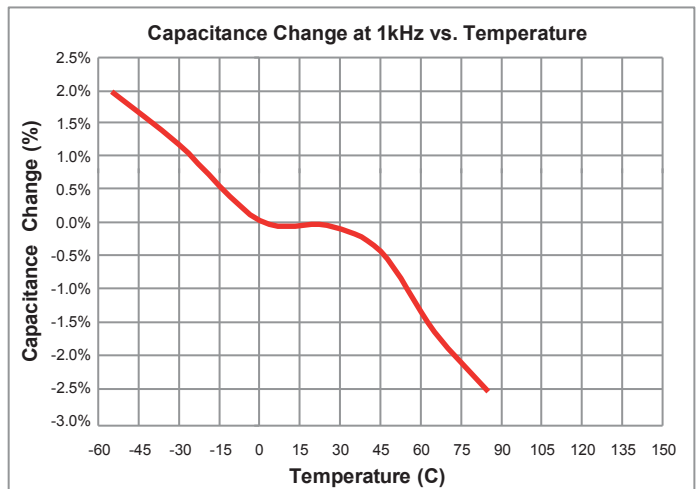
Parameter	Method	Condition
Vibration	204	D
Shock	213	I
Humidity	106	-
Thermal Shock	107	A
Life	108	F
Reference MIL-STD-202		

Characteristics



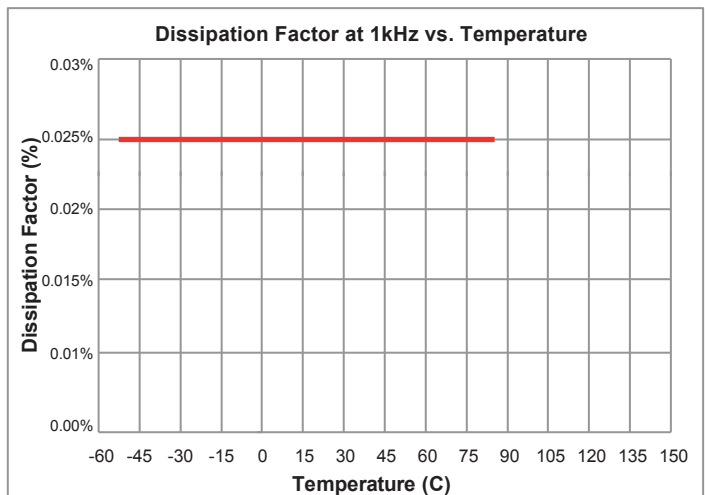
Dielectric Strength

Capacitors withstand a DC potential of 1.5 x rated voltage for one (1) minute without damage or breakdown. Test voltage is applied and discharged through a minimum resistance of 1 OHM per volt minimum.



Dissipation Factor

Polypropylene has an intrinsic dissipation factor of less than 2.1×10^{-4} over the operating temperature range of -55°C to +105°C and frequencies to 1MHz.



Detail Data

PART NUMBER	VAC @60Hz	CAPACITANCE (μ F)	CASE	E.S.R. (m Ω)	ESL (nH)	Fres (kHz)	I PEAK (A)	dv/dt (V/us)	CURRENT (ARMS)			
									25°C	45°C	65°C	85°C
3PH_1506_	300	50.0	1	6.6	25	142	1689	34	39.2	34.0	27.9	20.0
3PH_1107_	300	100.0	2	13.8	50	71	1603	16	29.3	25.5	20.9	15.0
3PH_1157_	300	150.0	5	2.2	25	82	5067	34	117.6	102.0	83.7	60.0
3PH_1207_	300	200.0	4	6.9	50	50	3206	16	58.6	51.0	41.8	30.0
3PH_1307_	300	300.0	6	4.6	50	41	4809	16	87.9	76.5	62.7	45.0
3PH_2256_	600	25.0	3	13.2	25	201	1689	68	39.2	34.0	27.9	20.0
3PH_2506_	600	50.0	4	27.6	25	142	1603	32	29.3	25.5	20.9	15.0
3PH_3166_	900	16.6	5	19.8	25	247	1689	101	39.2	34.0	27.9	20.0
3PH_3336_	900	33.3	6	41.4	50	123	1603	48	29.3	25.5	20.9	15.0

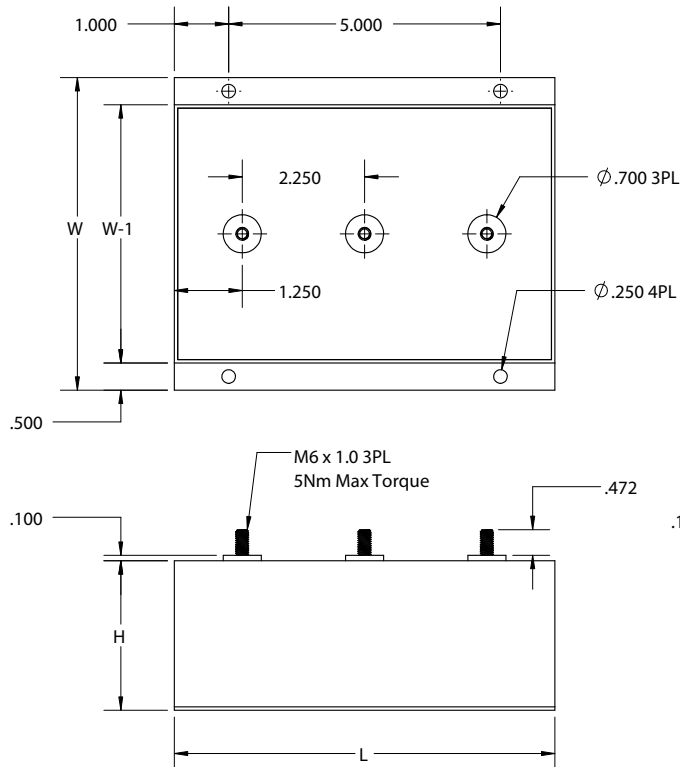
*Other capacitance and voltage values available upon request

**Embedded resettable thermal cut-out option available

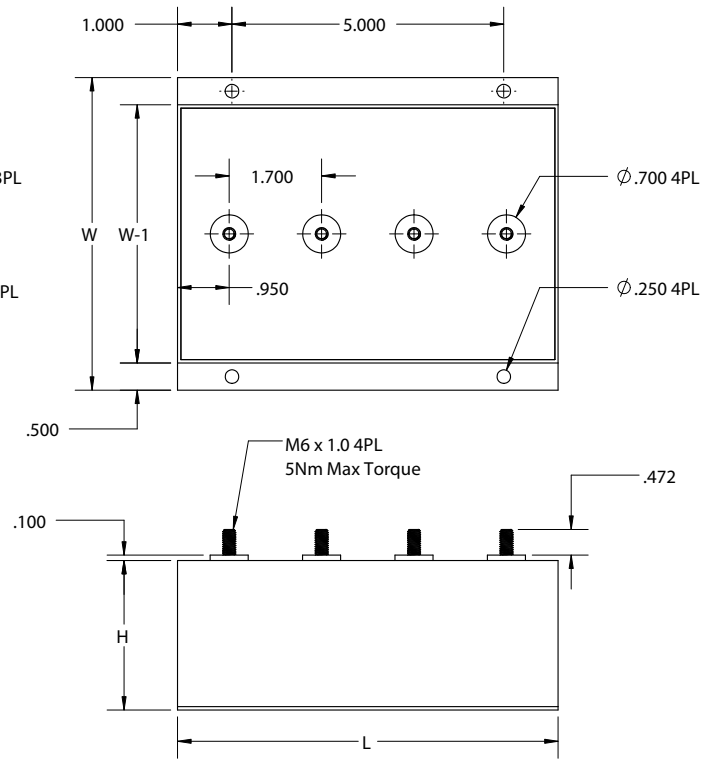
Style

Case #	L	W	H
1	7.00	3.50	2.75
2	7.00	3.50	4.75
3	7.00	5.75	2.75
4	7.00	5.75	4.75
5	7.00	8.00	2.75
6	7.00	8.00	4.75

DELTA



WYE (STAR)



TOLERANCE ON DIMENSIONS IS +/- 0.031"

Additional Information

Units are potted in plastic housing with flame retardant potting compound. High current terminals are tin plated brass. Engineered for rugged environments, extra moisture resistant materials and alternate voltage and capacitance packages available upon request.

How to Order

TYPE 3 phase packaged metallized polypropylene	→	3PH
STYLE Y - Star D - Delta	→	D
AC VOLTAGE 1 = 300VAC, 2 = 600VAC, 3 = 900VAC	→	1
CAPACITANCE IN PICO FARADS The first two digits are significant, the third represents the number of zeros (e.g. 506 = 50,000,000pF)	→	506
TOLERANCE J = ±5 Also available: ±3%	→	J
CUT-OUT OPTION A-No thermal cut-out, S-Normally closed thermal cut-out, T-Normally open thermal cut-out	→	A

Marking And Date Code

All capacitors are marked with company initials "EC", corporate logo or EC trademark—in addition to type 3PH, capacitance, tolerance, rated DC working voltage and date code. The first two digits of the date code represent the year, the second two digits the week, i.e., 1252 is the 52nd week of 2012, 1202 is the second week of 2012.

Quality Assurance

Major emphasis is placed on quality assurance. EC is an ISO 9001 and AS9100 Certified Company. Raw material inspection and the use of SPC manufacturing procedures assure the highest quality standards. Procedures are fully described in the EC Quality Control Manual. Electronic Concepts will continue to advance the state-of-the-art by utilizing leading edge technology, compact capacitor designs and establishing reliability procedures.

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