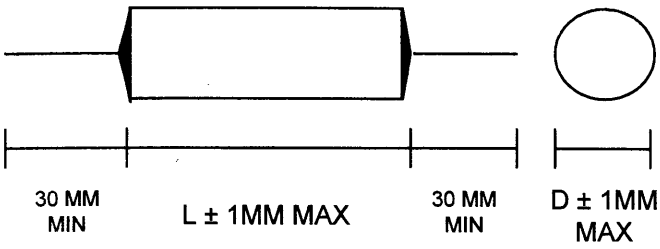
Ref S8.

LCR CAPACITORS

LOW LOSS
POLYSTYRENE
CAPACITORS
TYPE : FSC



POLYSTYRENE is a superior dielectric material with exceptionally high insulation resistance and low loss.
Aluminium foil electrodes are used and terminal wires are welded to them to ensure satisfactory performance at low voltage and high frequency.

LCR POLYSTYRENE FILM CAPACITORS offer:

Low temperature coefficient
Close capacitance tolerance
Extreme capacitance stability
Low power factor
High 0
High insulation resistance
Small physical size

LCR POLYSTYRENE CAPACITORS are recommended for use in I.F. transformers, tuned circuits, pulse networks, laboratory standards, timing circuits, analogue and digital computing circuits and many other applications where their superior qualities are used to advantage.

MARKING

Wherever possible capacitance, tolerance and working voltage are clearly indicated by black digital lettering, but on small components a letter code is used for tolerance and voltage.

VOLTAGE	CAPACITY (PF)	LENGTH MM NOMINAL	DAIMETER MM NOMINAL
30V	25 - 1,000	80	4.0
	1,001 - 2,000	80	4.5
	2.001 - 3,000	8.0	5.0
	3,001 - 5,000	10.0	5.5
	5,001 - 7,500	10.0	6.5
	7,501 - 30,000	15.0	9.0
	30,001 - 50,000	20.0	10.0
	50,001 - 100,000	30.0	11.0
	100,001 - 200,000	30.0	15.0
63V	25 - 500	8.0	4.0
	501 - 750	8.0	5.0
	751 - 1,000	10.0	5.5
	1,001 - 2,200	10.0	6.0
	2,201 - 5,000	10.0	8.0
	5,001 - 6,800	15.0	8.0
	6,801 - 10,000	15.0	8.0
	10,001 - 15,000	15.0	10.0
	15,001 - 40,000	20.0	15.0
	40,001 - 100,000	30.0	15.0
160V	25 - 250	8.0	4.0
	251 - 500	8.0	5.0
	501 - 1,000	10.0	6.0
	1,001 - 4,000	10.0	8.0
	4,001 - 7,500	15.0	9.5
	7,501 - 40,000	20.0	15.0
	40,001 - 100,000	30.0	18.0
400V	25 - 100	8.0	4.0
	101 - 470	10.0	6.0
	471 - 1,000	10.0	8.0
	1,001 - 2,200	10.0	9.0
	2,201 - 5,000	15.0	12.0
	5,001 - 15,000	20.0	15.0
	15,001 - 50,000	30.0	20.0
	50,001 100,000	44.0	25.0
630V	25 - 100	10.0	5.0
	101 - 250	10.0	6.0
	251 - 1,000	10.0	9.0
	1,001 - 3,000	15.0	10.0
	3,001 - 7,500	20.0	14.0
	7,501 - 40,000	30.0	23.0
	40,001 - 100,000	44.0	25.0

CHARACTERISTICS	
TYPE LCR (Standard Polystyrene)	
Capacitance :	25 pF - 200,000 pF
Capacitance Tolerance :	± 20%, ± 10%, ± 5%, ± 2.5% or ± 1pF min
Tolerances closer than 2.5% are available	
Voltage (DC working) :	30, 63, 160, 400, 630V
Temperature Range :	- 40°C to + 85°C
Temperature Coefficient :	N 150 ± 50 ppm/°C
Power Factor :	< 0.0005
Insulation Resistance (dry) :	> 10^6 MΩ
Insulation Resistance (after humidity cycle) :	> 50,000 MΩ
Test Voltage :	All caps tested at 2.5 times working voltage

Capacitance Tolerance Code

1pf - F
2.5% - H
5% - J
10% - K
20% - M

Voltage Letter Code

30 V - Z
160 V - X
400 V - V
630 V - U

Terminations :
Tinned copper wire

Capacitance Stability

Capacitor Length	Long Term Stability
10 mm and over	± (0.2% + 0.4 pF)
8 mm	± (0.5% + 0.4 pF)

Capacitor Length (mm)	Wire Diameter (mm)
8 mm	0.3
10 mm	0.4
over 10 mm	0.6

Twin twisted 0.6mm wires are used on capacitors above 50,000 pF.

Typical Capacitance Variation as a function of Temperature