



# FSC - Polystyrene (continued)

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 <sup>6</sup> 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

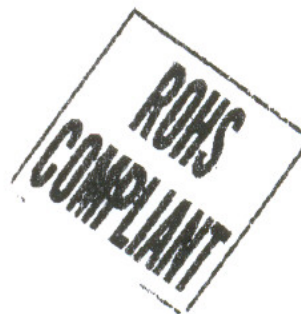
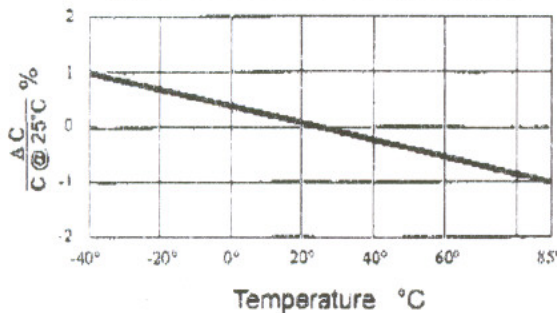
### Capacitance Stability

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



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**LCR**  
Capacitors

**LCR****FSC - Polystyrene**

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 Q  
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 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 (see over).



Voltage	Capacity (pF)	Length	Diameter
		(mm) Nominal	(mm) Nominal
30 V	25 - 1,000	8.0	4.0
	1,001 - 2,000	8.0	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	8.0
	30,001 - 50,000	20.0	10.0
83 V	50,001 - 100,000	30.0	11.0
	100,001 - 200,000	30.0	15.0
	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
160 V	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
	25 - 250	8.0	4.0
	251 - 500	8.0	5.0
	501 - 1,000	10.0	6.0
400 V	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
	25 - 100	8.0	4.0
	101 - 470	10.0	6.0
	471 - 1,000	10.0	8.0
630 V	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
	25 - 100	10.0	5.0
	101 - 25	10.0	6.0
630 V	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

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